US Disease Surveillance Apparatus Full Audit

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US Disease Surveillance Apparatus Full Audit

Master manuscript for Destiny Rezendes, independent investigative researcher Scope: U.S. government-connected or government-funded disease-surveillance, biodefense, detection, data-integration, and adjacent policy programs, 1999–2026. Research-session date: 12 August 2026.

Executive Summary

This audit consolidates eight independently researched program clusters spanning the Department of Defense, Department of Homeland Security, intelligence-community-adjacent organizations, HHS and its operating divisions, USAID, universities and federally funded research-and-development centers, commercial vendors, and international health-security structures. It distinguishes documented funding, contracts, ownership changes, personnel affiliations, and oversight findings from leads that could not be verified. “Connection” is used descriptively: a documented award, formal partnership, statutory role, investment, personnel appointment, co-location, or public record—not an inference of undisclosed direction or intent. The audit’s temporal frame begins with the late-1990s institutional formation of DTRA and the 1999–2000 intelligence assessments on infectious disease, follows the post-2001 build-out of bioterrorism and public-health systems, and closes with FY2026 budget records and 2026 contract activity.

The record documents a layered apparatus rather than one unified program. At the DoD end, Cooperative Threat Reduction (CTR) evolved from a post-Soviet dismantlement program into a biological-threat-reduction and overseas laboratory-support portfolio. The FY2026 CTR request was $282.830 million, with the Biological Threat Reduction Program (BTRP) request at $138.565 million; BTRP’s FY2025 enacted level reflected a $49.456 million (23.57%) decrease labelled “Program decrease – Gabon” in the cited budget document (DoD Comptroller, CTR OP-5 FY2026). The same record documents a contractor ecosystem operating through large ceiling vehicles, including CTRIC IV, reported as a $3.5 billion ceiling awarded in August 2025 (Washington Technology, 2025). A separate SIGAR audit of a CH2M Hill CBEP Afghanistan task order questioned $4,418,512 of $6,649,119 audited costs (66%), including $4,062,985 in ineligible subcontract costs and inadequate sole-source justifications affecting 127 of 135 transactions (SIGAR 21-08-FA).

Overseas laboratory and surveillance support is documented, but claims that exceed the record are not adopted here. For Ukraine, DoD reports approximately $200 million invested since 2005 and 46 supported laboratories, health facilities, and diagnostic sites; a U.S. Embassy page and a DTRA fact sheet disagree on whether three or four mobile laboratories were provided (DoD Ukraine BTRP fact sheet; U.S. Embassy Kyiv). The sources also record DoD’s statement that Russia took possession of two BTRP-upgraded facilities in 2014, and DTRA’s public denial that BTRP sponsors gain-of-function research or human experimentation (DTRA CTR Ukraine fact sheet).

USAID’s Emerging Pandemic Threats (EPT) architecture tied PREDICT, PREVENT, IDENTIFY, and RESPOND to later successor efforts. EPT-2 was reported as a $360 million five-year program; PREDICT-2’s federal award record to UC Davis reports $137,062,397, while UC Davis’s own grant page reports $138.4 million, a $1.34 million difference not reconciled in the located materials (EPT-2 external evaluation; USAspending PREDICT-2 award; UC Davis School of Veterinary Medicine). The award’s subaward data identify EcoHealth Alliance at $44,442,238 and Metabiota at $30,853,783. GAO documented that two NIH-funded second-tier subawards to Chinese entities passed through EcoHealth under a USAID cooperative agreement, while HHS OIG questioned $89,171 in EcoHealth costs and DoD

IG recorded DTRA's identification of $46.7 million in 13 EcoHealth projects from 2014–2023 (GAO-23-106119; HHS OIG A-05-21-00025; DoD IG DODIG-2024-099).

Metabiota is a central cross-cluster case because its documented record reaches USAID, DTRA, DHS, Army, Navy, NIH, CDC, State, commercial reinsurer Munich Re, and Ginkgo Bioworks. The consolidated federal record captured $22,163,510.88 in contracts and $39,732,243.36 in grants, plus the $30,853,783 PREDICT-2 subaward; its major DTRA contract HDTRA114C0104 was $18,417,699.34 (SEC Form D, 21 May 2015; USAspending HDTRA114C0104). The In-Q-Tel relationship is corroborated only by identified secondary sources, not a primary government filing, and the amount was not located. In contrast, the transaction with Ginkgo is independently documented in Ginkgo's SEC filing: in August 2022 Ginkgo acquired Metabiota assets from Baktus for $11.1 million in cash, stock, and transaction costs (Ginkgo Form 10-Q). The purported Metabiota "Cerberus Telesystems" SPAC merger is not supported: the session's SEC EDGAR search found zero results for that exact phrase, while the Baktus filings support a 2021 holding-company reorganization (Baktus Form D).

The civilian surveillance layer increasingly uses commercial platforms. CDC's Traveler-Based Genomic Surveillance program awarded Ginkgo $74,725,666.61 under contract 75D30125C20439 (2025–2028) after an earlier $62,551,726.04 airport-genomic-testing award; the earlier procurement received one offer (CDC traveler genomic surveillance). The program broadened from SARS-CoV-2 to a panel of more than 30 viral and bacterial targets and later funded metagenomic sequencing. Ginkgo also held an IARPA FELIX contract, an explicit corporate-level IC relationship, while the audit does not find evidence that the CDC traveler program itself is directed by an intelligence agency (USAspending.gov; CDC Advanced Molecular Detection).

DHS's statutory integrator, NBIC, shows the inverse pattern: a broad mission and limited, contested integration capacity. GAO reported annual NBIC budgets of $10–13 million for FY2012–2015 and, in 2015, found that only three of 19 partners supplied liaisons and eight of 11 key partners reported NBIC products helped little or not at all (GAO-15-793). Yet NBIC's Biofeeds tool, developed with PNNL, was reported to collect and categorize about 15,000 articles daily, with roughly 600 feeds added in FY2022 (GAO-24-106142). The prehistory of this architecture is materially important: Georgetown's Project Argus received ITIC and DHS funding; its patent identifies ITIC contract 2006-1016 426-000 and Army/NIH funding; DHS's NBIS Lite prototype was designed to ingest Argus (Wilson Senate testimony; US7725565B2; DHS OIG-07-61).

The audit finds documented—not presumptive—personnel and institutional overlap. James M. Wilson V led Argus, became NBIC's first chief of analytic operations, then served as Veratect CTO/chief scientist and testified to Congress about Veratect's ability to support NBIC (House hearing record). Dylan George's CDC biography identifies prior vice-presidential roles at In-Q-Tel and Ginkgo before his CDC Center for Forecasting and Outbreak Analytics directorship (CDC biography). These movements establish overlap and potential governance questions; they do not, by themselves, establish impropriety.

Several oversight and policy anomalies remain consequential. BioWatch logged 149 actionable results between 2003 and 2014 with no confirmed attack; the Gen-3 replacement was cancelled and BD21 was later paused (GAO-16-99; GAO-14-267T). HHS's P3CO review-group membership beyond its chair remains unpublished despite GAO and congressional scrutiny (GAO-23-105455). DoD's FY2026 request reduced the dedicated biosurveillance analytics line from $100.6 million to $75.5 million while maintaining larger detection and countermeasure categories (FY2026 CBDP RDT&E Justification Book). Finally, the Texas A&M CIADM vehicle had a $3,287,644,215 ceiling but reported only 13% utilized before its ordering period was shortened; Battelle's reported nonprofit revenue grew from $5.09 billion in FY2018 to $8.26 billion in FY2019 and $13.35 billion in FY2024 (HigherGov CIADM IDV record; ProPublica Nonprofit Explorer).

The most defensible overall conclusion is therefore limited but substantial: the United States has built a distributed surveillance and biodefense ecosystem in which mission ownership, data platforms, contract vehicles, and personnel frequently cross agency, contractor, academic, and international boundaries. The source record is strongest when it identifies a specific award, budget line, filing, statute, audit, or testimony. It is deliberately silent where those records were not located.

Methodology and Sourcing Standards

This manuscript is a synthesis of eight independently researched clusters whose underlying sources were fetched during the 12 August 2026 research session. Each cluster applied the shared standard reproduced here in practice: primary records were preferred, including federal award and contract records, budget justifications, statutes, congressional testimony, GAO and inspector-general reports, agency releases, SEC filings, patent records, peer-reviewed articles, nonprofit filings, and official international-organization materials. Secondary journalism, trade reporting, and advocacy material were retained only where the contributing cluster explicitly labeled it as secondary or where it supplemented a primary record. The source label has been retained in the underlying program profile whenever supplied.

Every factual claim in the inherited profiles retains its inline Markdown citation exactly as supplied in the source cluster. Dollar amounts are transcribed rather than rounded; award ceilings, obligated amounts, appropriations, revenue, valuations, and proposed funding are not treated as interchangeable. Where two sources report different values, the discrepancy is preserved and identified rather than resolved by editorial selection. This is particularly important for the PREDICT-2 award figure, Metabiota's secondary-market versus SEC financing figures, Ukraine mobile-laboratory counts, and a number of commercial or program "total" figures that mix ceilings with actual obligations.

The audit also applies a negative-evidence rule. If a suspected connection, award, company event, roster, or operational relationship could not be documented in material read during the session, it is recorded as "UNVERIFIED — no primary source located" or "no verified link found." Those statements are consolidated in Part X. They mean only that the stated research session did not locate supporting primary documentation; they are not proof that no such record exists. Conversely, a documented co-location, common contractor, award, investment, advisory appointment, or personnel move is reported as an overlap. It is not presented as evidence of unlawful conduct, covert tasking, causal responsibility, or a conflict of interest unless the cited record itself supports that conclusion.

The analysis is necessarily bounded. Classified programs, classified budgets, internal deliberations, and nonpublic subcontracts are outside the source record. USAspending and other public award databases can be incomplete for older assistance awards, can display obligations rather than ceilings, and may separate a recipient's record across predecessor names. SEC Form D filings describe exempt offerings, not necessarily every financing transaction or valuation. Several crucial statements in the clusters remain secondary-only. The manuscript maintains those qualifications rather than converting leads into verified findings. Its purpose is to supply a traceable, auditable map of the public record and an explicit register of what the record did not establish.

Part I: DoD Cooperative Threat Reduction / DTRA Biological Threat Reduction Network

Condensed cluster record

Profile convention. Each canonical profile below retains the inherited thirteen fields in compressed form: (1) name/aliases; (2) dates; (3) lead/award identifiers; (4) funding; (5) technology; (6) entities; (7) locations; (8) lineage; (9) outputs; (10) IC record; (11) interagency record; (12) oversight/anomalies; and (13) personnel. Detailed dollar-by-dollar evidence, including all figures from the underlying profiles, is retained without alteration in Part IX; negative findings are retained in Part X.

DoD CTR / DTRA BTRP / CBEP

1–13. Canonical profile

(1–2) Cooperative Threat Reduction (CTR), Nunn–Lugar, encompasses the BWPP (1998) → BTRP (2006) → CBEP → BTRP biological line. (3–4) DoD/DTRA executes the CTR appropriation; FY2026 requests are $282.830 million CTR and $138.565 million BTRP, following FY2025's $49.456 million "Program decrease – Gabon." (5–6) The portfolio spans threat-agent detection, laboratory construction and sustainment, EIDSS/PACS, BSVE, and integrating vehicles BTRIC, CTRIC III and CTRIC IV. (7) DTRA lists 35 active CTR partners, three planned partners, and seven closed programs. (8–9) The parent-agency lineage is Manhattan Engineer District → DNA/DSWA/OSIA/CTR/CBDP elements → DTRA (1998); EIDSS's planned open-source community is a documented downstream sustainment mechanism. (10) No primary document located establishes BTRP/CTR tasking or funding by CIA, ODNI, NIC, NCMI, or IQT. (11) Documented links include CDC/WHO facility support and OSD-P direction for biological-agent inventory. (12) SIGAR questioned $4,418,512 of $6,649,119 audited CH2M Afghanistan costs (66%); vehicle ceilings moved $4 billion → $970 million → $3.5 billion while the BTRP line declined. (13) Named officials include Rebecca K.C. Hersman, Tamer R. McGuire, Kenneth A. Myers III, and historical sponsors Sam Nunn and Richard Lugar (CTR OP-5; SIGAR 21-08-FA).

Overseas laboratory and regional engagement profiles

Ukraine laboratory network

(1–2) BTRP/CBEP Ukraine began under an August 2005 CTR agreement. (3–4) DTRA reports approximately $200 million since 2005 across 46 laboratories, health facilities, and diagnostic sites. (5–7) Work includes TADR, EIDSS, mobile laboratories, and BSL-2/BSL-3 facilities in Kyiv, Odesa, Vinnytsia and Lviv; the official record differs on whether three or four mobile laboratories were supplied. (8–9) The program describes conversion of former Soviet biological-weapons facilities to peaceful detection/diagnostic uses and records One Health research and the 2016 Silk Road biosurveillance network. (10–11) No operational US intelligence-agency link was verified; CDC and WHO

are named co-supporters. (12–13) DoD states Russia took two upgraded facilities in 2014; DTRA denies gain-of-function research and human experimentation. Contractor Black & Veatch's project page contains a Cameroon reference in a Ukraine description. The detailed facility dates, contractors, named local officials, costs and citations remain in Part IX (DoD Ukraine fact sheet).

Georgia, Kazakhstan, Uzbekistan, Armenia, Azerbaijan, Africa and Southeast Asia

(1–2) These are country and regional BTRP engagements; Georgia's Lugar Center opened in 2011/2013, Kazakhstan's Almaty CRL in 2015 with Kazakhstan assuming ownership in 2017, and Bechtel's Uzbekistan Phase 2 ran November 2010–October 2015. (3–4) DTRA/CTR is lead. Documented amounts include $150 million for Lugar Center construction, $102 million for the Almaty CRL, Africa awards of $35 million (CH2M, secondary), $56.1 million (Amentum), and $51.2 million potential (secondary). No primary funding figure was located for Uzbekistan, Armenia, Azerbaijan, or Southeast Asia. (5–7) Reported capabilities range from laboratory build-outs and PCR/biosafety equipment to PACS/EIDSS training, field epidemiology, sequencing and One Health programs. (8–9) The regional networks connect country infrastructure to BTRP and, for Azerbaijan/Georgia/Kazakhstan/Ukraine, BNSR. (10–11) No verified IC link was located for these facilities; documented CDC, WHO, Army/WRAIR, partner-ministry, AU, and host-government relationships are preserved in Part IX. (12–13) Russian-origin claims about Georgia, Armenia and Kazakhstan are identified as allegations, not verified findings; country-specific gaps remain in Part X.

Contract vehicles and prime contractors

BTRIC / CTRIC III / CTRIC IV; Black & Veatch; CH2M/Jacobs

(1–4) BTRIC (HDTRA1-08-D-0008) preceded CTRIC III (2018, $970 million ceiling) and CTRIC IV (2025, $3.5 billion ceiling; HDTRA124R0001). Black & Veatch award HDTRA125DE006 carries the shared $3.5 billion ceiling. (5–9) The vehicles procure laboratory design, equipment, biosafety/biosecurity, logistics, pathogen consolidation and software sustainment across the overseas network. CH2M became Jacobs in December 2017. (10–11) No vehicle-level IC relationship was verified; SIGAR provides the statutory IG oversight link. (12–13) The CH2M Afghanistan task order is the principal audit finding: questioned cost, inadequate sole-source justification in 127 of 135 transactions, and other control failures. Black & Veatch's Ukraine/Cameroon text conflation is retained as a record anomaly. See Part IX for award-level facts and Part X for negatives.

EIDSS, PACS, BSVE, USAMRIID, JPEO-CBRND, DLA and GEIS

DTRA software and DoD operational layer

(1–4) EIDSS and PACS are DTRA/BTRP systems under solicitation HDTRA120R0015; lifetime cost and data-governance terms were not located. BSVE is the DTRA cloud-based biosurveillance ecosystem, later inherited by DHS NBIC; its canonical profile is in Part VIII. (5–9) EIDSS is open-source disease reporting; PACS is a closed-network inventory ledger; both were deployed with partner ministries. USAMRIID is the Army's Fort Detrick high-containment institute; GEIS is the DoD global surveillance coordinator; JPEO-CBRND manages CBRN

acquisition and NGDS; DLA executed HHS stockpile logistics. (10–11) No verified IC link was found for EIDSS/PACS, GEIS, JPEO-CBRND, or DLA; USAMRIID's CIA-collaborator reference is tertiary and flagged. (12–13) USAMRIID's 2019 FSAP suspension, DLA's unnamed $803 million antigen-test vendors, and GEIS's funding-without-command model remain fully documented in Parts IX–X. See Part VIII for BSVE and Part III for ESSENCE/NSSP.

Metabiota — cross-reference

Metabiota's DTRA prime and subcontract record appears here only as a linkage: HDTRA114C0104 obligated $18,417,699.34 and Black & Veatch announced Iraq, Cameroon and Senegal subcontracts. See Part II, Metabiota, Inc., for the consolidated thirteen-field profile, all federal funding, financing records, IQT qualification, Baktus reorganization, and Ginkgo asset acquisition.

Part II: USAID Emerging Pandemic Threats, PREDICT, EcoHealth Alliance, and Metabiota

USAID EPT / PREDICT / successor programs

1–13. Canonical profile

(1–2) USAID's EPT architecture ran EPT-1 (2009–2014), EPT-2 (2014–2019), PREDICT (2009–2020), STOP Spillover (2020–2025), and DEEP VZN (2021–2024). (3–4) USAID and UC Davis held PREDICT-2 award AID-OAA-A-14-00102: $137,062,397 in USAspending versus UC Davis's $138.4 million figure. EPT-2 was described as a $360 million five-year program; PREDICT-1's final obligation total remains unverified. (5–6) cPCR, high-throughput sequencing, SURPI, GAINS, GRID, HealthMap and EIDITH supported virus discovery and data integration. Partners included UC Davis, EcoHealth, Metabiota, WCS, Smithsonian, Columbia and related universities. (7–8) Work covered 20 Phase-1 countries and roughly 30 Phase-2 country reports; it grew from USAID H5N1 work and later fed GVP, STOP Spillover, DEEP VZN and One Health Workforce. (9–10) No program-level IC link or documented IC data access was found. (11) CDC technical officers and FETP support are documented; no program-level DoD connection was verified. (12–13) GAO documented the USAID → UC Davis → EcoHealth → Chinese-entity second-tier subaward chain, and UC-system suspensions/terminations. Dennis Carroll, Jonna Mazet, Peter Daszak, William Karesh and Stephen Morse provide the key personnel record (USAspending PREDICT-2; GAO-23-106119).

STOP Spillover and DEEP VZN

STOP Spillover's canonical funding record is USAID award 7200AA20CA00032: announced at $100 million, with $31,159,947 obligated; Tufts led a consortium that did not include EcoHealth or Metabiota. DEEP VZN award 7200AA21CA00033 was announced at approximately $125 million, obligated $11,532,810, cancelled in 2023, and reportedly obtained no host-country permission in its initial countries. See Part IX for all subaward tables and Part X for outstanding award, access, and DTRA-link negatives.

EcoHealth Alliance

1–13. Canonical profile

(1–2) EcoHealth Alliance (EIN 31-1726494) evolved from Wildlife Preservation Trust International/The Wildlife Trust and rebranded in 2010; reported 2025 dissolution/successor claims remain secondary-only. (3–4) USAspending captures $10,348,193.46 in contracts and $71,597,965.44 in grants, plus $44,442,238 PREDICT-2 subawards. DoD IG records DTRA's self-identification of 13 projects totaling $46.7 million during 2014–2023. (5–7) Its disease-hotspots work, PREDICT role, NIH NIAID grants, and foreign subaward relationships are central; address and country scope are retained in Part IX. (8–9) Institutional continuity includes Karesh's WCS-to-EcoHealth move; no corporate spinoff is verified. (10) No CIA, ODNI, NIC, NCMI, or IQT funding/investment/tasking link was found. (11) NIH/NIAID, USAID, DTRA, DHS, CDC, USGS and Uniformed Services University relationships are documented. (12) OIG questioned $89,171, identified monitoring failures and 15 recommendations; GAO documented foreign subawards; HHS debarred Peter Daszak through 20 May 2029. (13) Daszak, Karesh and Jonathan Epstein are the principal personnel record (HHS OIG; HHS Notice).

Metabiota, Inc.

1–13. Canonical profile

(1–2) Global Viral Forecasting, Inc. → Epintel, Inc. → Metabiota, Inc.; Baktus became the 2021 holding company. (3–4) Direct federal awards captured total $61,895,754.24 ($22,163,510.88 contracts and $39,732,243.36 grants), plus $30,853,783 PREDICT-2 subawards; HDTRA114C0104 obligated $18,417,699.34. (5–7) The company developed epidemiological risk analytics and operated from San Francisco with reported international offices and DTRA subcontract work in Iraq, Cameroon and Senegal. (8–9) Baktus's Form D records a September 2021 first sale; on 19 August 2022 Ginkgo acquired Metabiota epidemiological-data assets in an $11.1 million asset acquisition, bringing Nita Madhav to Concentric. (10) Munich Re and IQT announced strategic agreements in 2017, but no primary record located an IQT equity amount or percentage. (11) USAID, DTRA, Navy, DHA, CDC, NIH, DHS and State awards are recorded. (12) No COI firewall was located; no bankruptcy filing was located; the "Cerberus Telesystems" SPAC premise is contradicted by the SEC search and Baktus record; Burisma/Hunter Biden claims are unverified. (13) Wolfe, Mann, Kertesz, Rossi, Madhav and Guttieri are named in the inherited records (SEC Form D; Ginkgo 10-Q).

Global Virome Project — cross-reference

GVP is the PREDICT/EPT successor initiative whose board connects Carroll, Daszak, Mazet and Metabiota's Rubin. Its cross-border and FOIA-sourced claims are preserved in Part VII and Part X. See Part VII, Global Virome Project, for the canonical successor profile.

Part III: HHS, CDC, NIH, NIAID, BARDA, and ASPR Biosurveillance

Civilian surveillance systems

BioSense / NSSP / ESSENCE

(1–13) BioSense (2003) → BioSense 2.0 (2011) → the ESSENCE-based NSSP/BioSense Platform (2016 onward) is CDC's national syndromic-surveillance line. It originated in DoD/VA data feeds and now covers more than 7,500 facilities. Named award data, DoD/VA lineage, NIH algorithms funding, and GAO-09-100 cost/timeline/performance criticisms remain in Part IX. ESSENCE is canonical in this Part; see Part VIII, ESSENCE and SAGES for the DOD-origin and commercialization cross-reference.

Global Disease Detection, EIS and NWSS

GDD grew from IEIP (2001) into ten regional centers and a roughly 90-country network; published sources provide no discrete GDD budget. EIS remains CDC's 1951 field-epidemiology program; its appropriations are unverified. NWSS began in 2020; identified awards across Biobot, Verily, Goldbelt and other vendors total approximately $93.5 million, but total lifetime funding is unverified. The profiles retain facilities, technologies, agencies, places, lineages, no-verified-IC findings, funding cliffs, and named personnel in the Part IX ledger and Part X register.

Traveler-Based Genomic Surveillance / Ginkgo — cross-reference

CDC's TGS began at three airports in 2021 and expanded from SARS-CoV-2 to a multipathogen panel and metagenomic sequencing. It has no verified program-level IC direction; Ginkgo's IARPA FELIX relationship is corporate-level. See Part V, Ginkgo Bioworks / Concentric, for the canonical vendor profile; Part IX preserves every TGS contract, airport, vendor, and award figure.

BARDA, DRIVe, ASPR, PAHPA, strategy, and CEIRS/CEIRR

PAHPA created ASPR and BARDA in 2006. BARDA and JPEO-CBRND reported 290 COVID awards totaling nearly $48 billion through FY2021; DRIVe/BARDA Ventures committed $50 million over five years with up to $500 million over ten years through GHIC. ASPR's reorganization, PHEMCE role, and workforce findings; National Biodefense Strategy governance gaps; and CEIRS/CEIRR's approximately $832 million three-cycle award record are preserved in Part IX. No verified IC link was found for BARDA, DRIVe or CEIRS/CEIRR in the sources examined.

Part IV: DHS, the Intelligence Community, and DARPA Biodefense/Biosurveillance

Project Argus / NBIS / NBIC

1–13. Canonical profile

(1–2) Georgetown Project Argus became operational in 2007 and later fed NBIS/NBIC. (3–4) ITIC and DHS funding are documented, as are ITIC contract 2006-1016 426-000 and the NBIS Lite SAIC prototype at approximately $123,000; no consolidated Argus total was found. (5–7) Argus used open-source, social-disruption indicators, maintained thousands of cases across roughly 175 countries, and was foreign-only under its funding constraints. (8–9) Argus → NBIS/NBIC → Veratect → SPADAC → GeoEye Analytics is the canonical lineage; Ascel Bio is a parallel branch. (10) ITIC and the Open Source Center establish the IC relationship. (11) TATRC, NLM, DTRA and USSTRATCOM links are documented. (12–13) AGIS/Apollo claims remain unverified; Wilson's Georgetown → NBIC → Veratect movement raises a documented governance question, not a finding of misconduct. See Part V, Veratect, for the commercial cross-reference (Wilson testimony; Argus patent).

NBIC

NBIS (2004) became statutory NBIC (2007); its lifecycle continues through OHA → CWMD → Office of Health Security. It has statutory DNI consultation, partners with HHS and DTRA, and operates Biofeeds. GAO documented weak liaison participation and use, then performance-measure shortcomings. The full canonical NBIC profile is here; see Part VIII, NBIC for the FY2026 budget/reorganization cross-reference, and Part III for the HHS interface.

BioWatch / BD21 / NBACC / NCMI

BioWatch's 149 actionable results from 2003–2014 yielded no confirmed attack; Gen-3 was cancelled and BD21 paused. The FY2026 program transfer is fully preserved in Parts IX–X. NBACC is the DHS Fort Detrick biodefense center; see Part VI, Battelle/BNBI for the canonical operator profile. NCMI is a DIA medical-intelligence component whose reported November 2019 COVID warning remains unverified and was denied by its director. No BioWatch/BD21 IC tasking or data-sharing was verified.

DARPA and IQT

DARPA BTO profiles include PREEMPT, PREPARE, P3, Insect Allies and the rejected DEFUSE proposal; their awards, performers, uncertainty fields, and ethical/oversight facts remain in Part IX. DEFUSE received zero US dollars. IQT's 2017 Metabiota announcement did not disclose an investment amount; the entity profile is cross-referenced to Part II. The direct IC disease-forecasting case is IARPA OSI/EMBERS; its canonical profile is in Part VIII.

Part V: Commercialization and Biosurveillance Software Platforms

HealthMap / ProMED / BlueDot / EIOS / Google Flu Trends

HealthMap began at Boston Children's/Harvard, was supported by NIH/CDC/USAID/IARPA records, and commercialized through Epidemico's acquisition by Booz Allen; its IARPA subcontract is documented. ProMED

remains a nonprofit upstream signal source and holds a $514,141 USAID award. BlueDot is Canadian; no US federal award or IQT link was located. EIOS is WHO-led and received documented CDC regional expansion support without a published amount. Google Flu Trends is a privately funded historical cautionary case. Complete 13-field records, including contracts, acquisition terms, financing and non-findings, are retained in Part IX and Part X.

Ginkgo Bioworks / Concentric — canonical profile

(1–2) Ginkgo (NYSE: DNA) operates the Concentric/Ginkgo Biosecurity line and announced a 2026 sale of its biosecurity business. (3–4) CDC awards include $74,725,666.61 under 75D30125C20439 and $62,551,726.04 under 75D30122C14933; identified federal awards approximate $190 million. (5–7) It supports TGS sequencing through a 60-plus laboratory network and works with XpresCheck at airport sites. (8–9) Ginkgo became public through Soaring Eagle and acquired Metabiota data assets; see Part II for the exact $11.1 million terms. (10) IARPA FELIX is explicit; any IQT investment amount is unverified. (11) CDC, NIH, DARPA, Army and Navy awards are documented. (12–13) One-offer procurement, securities litigation settlement, segment decline/divestiture, and the Wegrzyn/George/Wolfe personnel record are retained in Part IX. See Part III for the TGS program itself.

Palantir and the wider vendor layer

Palantir's HHS Protect, Tiberius, DCIPHER and Common Operating Picture lineage is retained in Part IX. The April 2020 package totaled $24.9 million and the CDC Common Operating Picture was reported at $443 million over five years; GAO found duplication and no identified savings. Additional vendor awards are retained in the Part IX table; no unsupported IC linkage is inferred from national-security adjacency.

Part VI: University-Hosted and FFRDC/Nonprofit Biodefense and Biosurveillance Centers

Johns Hopkins Center for Health Security / UPMC

The center's CCBS → UPMC Center for Biosecurity → UPMC CHS → Johns Hopkins CHS lineage, sponsor lists, CDC CORI award, philanthropy, and exercises are retained in Part IX. Tara O'Toole's documented center → DHS S&T → IQT pathway is a personnel record, not proof of misconduct. Event 201's named-player roster was not verified from a primary source. See Part IX for the canonical profile and all exercise detail.

Georgetown, GMU, CSU, Texas A&M, Battelle, MRIGlobal and SRI

Georgetown's present GHSS is cross-referenced to canonical Argus in Part IV. GMU's NIAID-funded BRL and Bailey's USAMRIID → DIA → NIAID network record remain in Part IX. CSU is the document set's clearest HHS-only biocontainment case. Texas A&M CIADM's $3.287644215 billion ceiling and 13% utilization are retained in Part IX. Battelle/BNBI is the canonical NBACC operator profile: DHS FFRDC sponsor agreement, 2015 award, DTRA STEP 2.0

and nonprofit finances are cross-cutting records. MRIGlobal's DTRA-to-CDC dual channel and SRI's DARPA-only record are preserved with all award values and caveats in Part IX.

Part VII: Global Health Security Agenda and International Programs

GHSA / IHR / GDDOC / GOARN / Pandemic Fund / PEPFAR

GHSA was launched in 2014 and USAID/CDC obligated $1.251 billion FY2015–FY2019; IHR/JEE provides the measurement architecture; GDDOC is CDC's event-based surveillance/GOARN liaison. GOARN has no documented direct US appropriations line. The Pandemic Fund received $700 million in US pledges by May 2023 and an announced up-to-$667 million additional commitment; PEPFAR infrastructure supplied documented COVID laboratory and information-system capacity. Every country count, funding distinction, legal change, source qualification and negative finding is retained in Part IX and Part X.

Global Virome Project — canonical profile

(1–4) GVP is the private successor initiative to EPT/PREDICT, distinct from official STOP Spillover. FOIA-based secondary reporting identifies at least $270,969 or $1.3 million of USAID-related support, but those records were not independently retrieved. (5–9) Its virus-cataloguing concept and board link EPT/PREDICT personnel and UC Davis; no direct federal prime award was identified. (10–11) No IC, DTRA, DARPA, JPEO-CBRND or BARDA funding was documented. (12–13) The Carroll/Daszak governance issue, China-collaboration reporting and sample-custody claims are retained with secondary labels. See Part II for PREDICT and Metabiota.

NTI, Rockefeller, Africa PGI/Africa CDC, and the 2025–2026 rupture

NTI bio/GHS Index and Rockefeller PPI have no verified US federal funding links in the examined sources. Africa PGI is the verified Gates–CDC co-funded surveillance case, although partner-level contributions are undisclosed. Africa CDC has CDC support and an explicit but unquantified DTRA connection. EO 14155, IHR rejection and the America First Global Health Strategy reversed the previous WHO/GHSA setting; all legal dates, amounts, and caveats are retained in Part IX.

Part VIII: Obscure Programs and Gain-of-Function Policy Architecture

GOHIS and BioCat

GOHIS — canonical negative profile

No US government, DoD or HHS program named GOHIS was verified. The verified referent is the UK-funded Quadripartite Global One Health Intelligence System proposal of FAO, UNEP, WHO and WOAH. It is not NCMI, and no US intelligence relationship was documented. See Part X for the complete negative record.

BioCat 2.0 — canonical profile

BioCat/BioCat 2.0 was a PNNL semantic catalog of biosurveillance models produced under DOE contract DE-AC05-76RL01830 for DHS NBIC/OHA/S&T. The dollar value was not located. It catalogued 6,524 items and reviewed 44 models; it was not a surveillance company, commercial spinoff, or verified IC program. The public catalog URL is no longer reachable. This is the canonical profile; it supersedes the brief references elsewhere.

Policy architecture, CBDP, BSVE, GEIS, ESSENCE, EMBERS and STOP Spillover

DURC, P3CO, NSABB, EO 14292 and FSAP establish the core research-governance record. P3CO membership beyond its chair remains unpublished; the 2024 DURC/PEPP policy was rescinded before taking effect, leaving the CRS-documented policy-status gap. CBDP's FY2026 request was $1.61 billion, while its dedicated analytics line fell from $100.6 million to $75.5 million. BSVE is the canonical DTRA-to-NBIC successor profile; see Part I for its original fact sheet. GEIS and DHA Integrated Biosurveillance document information exchange with NCMI, NBIC, CDC, State and DTRA. ESSENCE is canonical in Part III; IARPA OSI/EMBERS is the direct IC-funded forecasting profile; STOP Spillover is canonical in Part II. Detailed program profiles, award classifications, personnel, and explicit negative findings remain in Parts IX–X.

Part IX: Cross-Cutting Network Analysis

Scope and interpretive discipline

This section synthesizes relationships that recur across the eight Parts. It treats awards, investment announcements, advisory roles, co-location, and personnel employment histories as discrete documented facts. No row or lineage arrow should be read to imply undisclosed direction, illegal conduct, or causal responsibility. "IC" denotes the Intelligence Community only where the cited source identifies an IC element, an IC funding vehicle, or an IC component such as IARPA; DHS, DoD, and law enforcement are not collapsed into "IC" merely by national-security adjacency.

Funding totals and reported-dollar inventory

The following inventory preserves every source-cluster line containing a concrete dollar figure. It deliberately keeps the original evidence text and citations so that a reader can distinguish actual obligations, award values, ceilings, appropriations, revenue, private financing, and estimates. It is an evidence ledger, not a spending total.

Caveated aggregate estimate. A mechanically additive selection of only the largest, top-level published values in this manuscript—CTRIC IV's $3.5 billion potential ceiling, the Texas A&M CIADM $3.287644215 billion vehicle ceiling, FY2026 CBDP $1.61 billion request, the DFC's up-to-$1.1 billion Ginkgo loan approval, the reported >$480 million NBACC award, the $443 million CDC Common Operating Picture award, and the $282.830 million FY2026 CTR request—exceeds $10.70 billion. This is not an estimate of total expenditure, total program cost, or unique federal funding: it mixes ceilings, requests, a loan authorization, and award values; may include overlapping funding; excludes large items with no verified total; and should not be added to the detailed rows below.

Part / profile	Figure classification	Source text with inline citation
Part I: Cluster Summary	Reported dollar figure(s) as transcribed	The biological line of effort was created as Biological Weapons Proliferation Prevention in 1998, renamed the Biological Threat Reduction Program (BTRP) in 2006, then rebranded the Cooperative Biological Engagement Program (CBEP), and has since reverted to BTRP in DoD budget documents (RAND RR660; DTRA BTRP fact sheet, Aug. 2023). Its FY2026 request is $138.565 million inside a $282.830 million CTR topline (DoD Comptroller, CTR OP-5, FY2026).
Part I: Cluster Summary	Reported dollar figure(s) as transcribed	The documented anomalies in this cluster are: (1) a 66 percent questioned-cost rate on an audited CH2M Hill CBEP task order in Afghanistan, including $4,062,985 of ineligible subcontract costs and sole-source justification failures on 127 of 135 transactions (SIGAR 21-08-FA); (2) a congressional cut of $49.456 million (−23.57 percent) to BTRP in FY2025 labeled "Program decrease – Gabon" (CTR OP-5, FY2026); (3) DoD's own admission that Russia seized two BTRP-upgraded Ukrainian laboratories in 2014 and still denies Ukrainian access (DoD Ukraine BTRP fact sheet, 11 Mar. 2022); (4) the contract-vehicle escalation from BTRIC ($4 billion potential ceiling) to CTRIC III ($970 million) to CTRIC IV ($3.5 billion ceiling, awarded August 2025) (Defense Daily; Washington Technology, 2025); and (5) the transfer of DTRA-adjacent epidemiological data infrastructure from Metabiota into Ginkgo Bioworks (NYSE: DNA) in August 2022 (Ginkgo/PRNewswire).
Part I: 1. DoD Cooperative Threat Reduction (CTR) Program / Nunn-Lugar	Reported dollar figure(s) as transcribed	2. Active dates and lifecycle. Enacted late 1991 as the Nunn-Lugar amendment; FY1992 authorization $400 million; DoD received $300–400 million per year FY1992–FY1998 and $403–475 million per year FY1999–FY2004 (CRS 97-1027). CTR funds have been disbursed by DTRA since 1997 (CRS 97-1027). The umbrella CTR agreement with Russia lapsed in June 2013 and was replaced by a protocol under the Multilateral Nuclear Environmental Program in the Russian Federation (MNEPR) signed 14 June 2013; Russia withdrew from most remaining programs at the end of 2015 (CRS R43143). The program continues under the Cooperative Threat Reduction Act codified in P.L. 113-291 (CRS R43143).
Part I: 1. DoD Cooperative Threat Reduction (CTR) Program / Nunn-Lugar	Reported dollar figure(s) as transcribed	4. Total government funding. DoD CTR appropriations reported by CRS: FY2014 $581.5 million; FY2015 $365.1 million; FY2016 $358.5 million (CRS R43143). Recent CTR toplines (thousands): FY2024 actual $350,999; FY2025 enacted $296,076; FY2026 request $282,830 (CTR OP-5, FY2026). A single cumulative lifetime total for CTR was not located in a primary source during this session — the widely cited "Nunn-Lugar Scorecard" totals are referenced but not itemized in the documents fetched here (Nunn-Lugar brochure; National Academies ch. 1).

Part / profile	Figure classification	Source text with inline citation
Part I: 2. DTRA Biological Threat Reduction Program (BTRP)	Reported dollar figure(s) as transcribed	4. Total government funding. From the FY2026 CTR OP-5 (thousands): FY2024 actual $218,406; FY2025 request $209,858 with a congressional decrease of −$49,456 (−23.57 percent) annotated "Program decrease – Gabon", producing an FY2025 enacted level of $160,402; FY2026 request $138,565 (CTR OP-5, FY2026). Other CTR sub-lines in the same document are CSE, DSTR, GNS, OAAC, and PPP (CTR OP-5, FY2026).
Part I: 2. DTRA Biological Threat Reduction Program (BTRP)	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. The FY2025 "Program decrease – Gabon" cut of $49.456 million is the single largest unexplained line movement in the CTR OP-5 (CTR OP-5, FY2026). BTRP is the declared target of a joint Chinese-Russian influence operation that "name and shame[s]" DTRA officials [SECONDARY] (Washington Times). The State Department has formally rebutted Kremlin allegations of chemical and biological weapons laboratories in Ukraine (U.S. Department of State archive).
Part I: 3. Cooperative Biological Engagement Program (CBEP)	Reported dollar figure(s) as transcribed	4. Total government funding. The audited Afghanistan task order was originally valued at $11,850,127 and finally at $10,403,756, of which $6,649,119 was audited (SIGAR 21-08-FA). Black & Veatch's Ukraine CBEP award was reported at approximately $85 million over five years on 8 October 2012 [SECONDARY] (CNBC/PRNewswire).
Part I: 3. Cooperative Biological Engagement Program (CBEP)	Reported dollar figure(s) as transcribed	12. Controversies and audit findings. SIGAR 21-08-FA (November 2020) is the most serious documented finding in this cluster. Of $6,649,119 in audited costs, $4,418,512 (66 percent) were questioned, comprising $4,062,985 in ineligible subcontract costs and $343,421 in questioned fee. The audit identified 2 material weaknesses, 2 significant deficiencies, and 4 instances of noncompliance, recorded as findings 2019-01 through 2019-04: failure to reconcile accounts; inadequate sole-source justification affecting 127 of 135 transactions and 7 of 11 subcontractors; insufficient subcontractor cost review; and inadequate country cable clearances (SIGAR 21-08-FA).
Part I: 4. Ukraine Laboratory Network (Kyiv, Odesa, Lviv, Vinnytsia, Kharkiv)	Reported dollar figure(s) as transcribed	4. Total government funding. Approximately $200 million invested since 2005, supporting 46 Ukrainian laboratories, health facilities and diagnostic sites (DoD Ukraine fact sheet; DTRA's own Ukraine fact sheet repeats the 46-site figure and adds 3 mobile diagnostic laboratories provided to the Ministry of Defense, DTRA CTR Ukraine fact sheet). Note the discrepancy: the U.S. Embassy in Kyiv states DTRA provided four mobile laboratories to the Sanitary-Epidemiological Department of the MoD Medical Command, deployed in Kyiv, Lviv and eastern Ukraine (U.S. Embassy Kyiv). Facility-level costs documented: the Vinnytsia Interim Central Reference Laboratory cost USD $1,504,840 total ($1,106,610 design/construction plus $398,230 equipment) (Vinnytsia fact sheet, U.S. Embassy Kyiv).
Part I: 5. Georgia — Richard G. Lugar Center for Public Health Research (Lugar Lab, Tbilisi)	Reported dollar figure(s) as transcribed	4. Total government funding. The U.S. Embassy in Tbilisi states the U.S. government funded construction with $150 million (U.S. Embassy Tbilisi). A separate figure of approximately $350 million in 2018 is attributed to the total cost of the financial and technical assistance program covering the LRC plus the wider laboratory network (Lugar Research Center, Wikipedia). These two figures measure different scopes and should not be conflated.

Part / profile	Figure classification	Source text with inline citation
Part I: 6. Kazakhstan — Central Reference Laboratory (CRL), Almaty	Reported dollar figure(s) as transcribed	4. Total government funding. $102 million (VOA fact-check; corroborated at National Geographic). Kazakhstan's Foreign Ministry states the CRL is "fully owned by the Republic of Kazakhstan" and funded "solely from the republican budget" with an all-domestic staff (VOA fact-check).
Part I: 10. DTRA Biosurveillance in Africa	Reported dollar figure(s) as transcribed	4. Total government funding. CH2M West Africa: $35 million (Nov. 2016) [SECONDARY] (Global Biodefense). Amentum: $56.1 million, three-year base with options to five years, for Ethiopia and the African Union (Amentum press release); a separate Amentum award of $51.2 million potential over five years (2-year base plus three options) covers Kenya, Gabon, Guinea and Cameroon [SECONDARY] (ExecutiveBiz). Metabiota held a $450,000 Black & Veatch BTRIC subcontract for biosafety at Cameroon's LANAVET National Veterinary Laboratory and a CTRIC III Task Order 02 subcontract worth a potential $600,000 with a 12-month option supporting the National Public Health Laboratory (NPHL) in Thiès, Senegal [SECONDARY] (Business Insider/PRWeb). DTRA's own Active Contract List names LNERV — the National Laboratory for Livestock and Veterinary Research and ISRA — the Institute of Agricultural Research as requirement descriptors (DTRA Active Contract List).
Part I: 10. DTRA Biosurveillance in Africa	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. The FY2025 congressional BTRP cut is annotated "Program decrease – Gabon" — the only country-specific programmatic cut in the CTR OP-5 and a direct hit on an African engagement line (CTR OP-5, FY2026). Gabon is also one of the four countries in Amentum's $51.2 million BTRP award [SECONDARY] (ExecutiveBiz). This is the single strongest funding anomaly in Cluster 1 and warrants a FOIA to DTRA for the Gabon program record.
Part I: 13. Contract Vehicles: BTRIC → CTRIC III → CTRIC IV	Reported dollar figure(s) as transcribed	BTRIC (Biological Threat Reduction Integrating Contracts). Awarded 2008 under PIIN HDTRA1-08-D-0008 (SIGAR 21-08-FA). DTRA selected five firms for task-order competition over up to 10 years with a potential value of $4 billion; each company was guaranteed $500,000; only Black & Veatch had received a task order at the time of reporting, valued at $175.3 million over an initial five-year period including options; the other selectee was a team of URS Corp., Bechtel Corp., CH2M Hill and AECOM Government Services [SECONDARY] (Defense Daily).
Part I: 13. Contract Vehicles: BTRIC → CTRIC III → CTRIC IV	Reported dollar figure(s) as transcribed	CTRIC III. Awarded June 2018 with a $970 million ceiling to six firms — Black & Veatch, CH2M (Jacobs), PAE, Parsons, Raytheon, and URS Federal Services (AECOM); incumbent Bechtel was not selected; BTRIC services were rolled into CTRIC III [SECONDARY] (Washington Technology 2018). DTRA obligated approximately $779.3 million against CTRIC III since 2018, with Amentum the largest recipient at roughly $505.1 million (64.5 percent) [SECONDARY] (Washington Technology 2025).

Part / profile	Figure classification	Source text with inline citation
Part I: 13. Contract Vehicles: BTRIC → CTRIC III → CTRIC IV	Reported dollar figure(s) as transcribed	CTRIC IV. Solicitation HDTRA124R0001, ceiling $3.5 billion, five-year base plus five-year option; awards made August 2025 to Amentum, Black & Veatch, Fluor, Parsons, V2X and Jacobs (six awardees from seven bids) [SECONDARY] (Washington Technology 2025). The Black & Veatch Special Projects Corp. award record shows award ID HDTRA125DE006, value $3,500,000,000, award date 21 August 2025, posted 26 August 2025, place of performance "Multiple, Outside the United States," DTRA contracting contact marvin.k.walker.civ@mail.mil, FPDS organization code 9761-HDTRA1 (HigherGov, CTRIC IV / Black & Veatch). The corresponding Amentum award carries ID HDTRA125DE001 (HigherGov, CTRIC IV / Black & Veatch).
Part I: 13. Contract Vehicles: BTRIC → CTRIC III → CTRIC IV	Reported dollar figure(s) as transcribed	Anomaly. The published ceilings move from $4 billion (BTRIC, up to 10 years) down to $970 million (CTRIC III) and back up to $3.5 billion (CTRIC IV) — a 3.6x ceiling increase between the 2018 and 2025 recompetes, while the BTRP operating line was simultaneously cut from $218.4 million (FY2024 actual) to a $138.6 million FY2026 request (Defense Daily; Washington Technology 2025; CTR OP-5, FY2026).
Part I: 14. Black & Veatch (Black & Veatch Special Projects Corp.)	Reported dollar figure(s) as transcribed	2. Active dates. DTRA biological work initiated 2008; established Ukraine's first BSL-3 laboratory in 2010 — described as the first BSL-3 commissioned by the agency; the ~$85 million five-year CBEP Ukraine contract was announced 8 October 2012; CTRIC IV award 21 August 2025 (CNBC/PRNewswire; HigherGov).
Part I: 14. Black & Veatch (Black & Veatch Special Projects Corp.)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies. DTRA (HDTRA1); also U.S. Army — Black & Veatch Special Projects Corp., Overland Park, Kansas, holds Army contract W912DY-26-D-A009 as part of a $400 million full-spectrum facility engineering vehicle dated 21 January 2026 [SECONDARY] (ClearanceJobs).
Part I: 14. Black & Veatch (Black & Veatch Special Projects Corp.)	Reported dollar figure(s) as transcribed	4. Total government funding (documented in this cluster). BTRIC task order $175.3 million [SECONDARY] (Defense Daily); CBEP Ukraine approximately $85 million over five years [SECONDARY] (CNBC/PRNewswire); CTRIC IV award value $3,500,000,000 (shared ceiling) (HigherGov).
Part I: 14. Black & Veatch (Black & Veatch Special Projects Corp.)	Reported dollar figure(s) as transcribed	8-11. Corporate lineage: 2011 revenues of $2.6 billion [SECONDARY] (CNBC/PRNewswire). No verified IC link found.
Part I: 15. CH2M Hill / Jacobs	Reported dollar figure(s) as transcribed	3-4. Agencies and funding. DTRA/SCC-WMD; HDTRA1-08-D-0008 TO 0006, original $11,850,127, final $10,403,756 (SIGAR 21-08-FA); West Africa $35 million [SECONDARY] (Global Biodefense).
Part I: 15. CH2M Hill / Jacobs	Reported dollar figure(s) as transcribed	12. Controversies and audit findings. SIGAR 21-08-FA questioned $4,418,512 of $6,649,119 audited costs (66 percent), including $4,062,985 in ineligible subcontract costs and $343,421 in questioned fee, with two material weaknesses, two significant deficiencies and four noncompliances; sole-source justification was inadequate for 127 of 135 transactions and 7 of 11 subcontractors; contract auditor CohnReznick (SIGAR 21-08-FA).

Part / profile	Figure classification	Source text with inline citation
Part I: 16. Metabiota, Inc. (and the Ginkgo Bioworks Transfer)	Reported dollar figure(s) as transcribed	4. Total government funding. Current and potential award amount $23,866,388.00; obligated $18,417,699.34; outlayed $0.00 (USAspending record). Transaction history: base action 02/07/2014 $4,868,566; modification P00005, 05/14/2014, $2,566,677 for "QUALIFIED TRAINERS (TASK 3)"; P00006, 06/13/2014, "SURGE SUPPORT FOR THE EBOLA VIRUS OUTBRE[AK]"; P00007, 06/27/2014, $403,262 "REA SETTLEMENT"; P00008, 08/13/2014, "SURGE SUPPORT (TASK 7)"; P00009, 09/03/2014, " REA SETTLEMENT" (USAspending record). Subcontract values: BTRIC-Iraq up to $900,000 over 18 months; BTRIC-Cameroon $450,000; CTRIC III TO 02 Senegal potential $600,000 with a 12-month option [SECONDARY] (Business Insider/PRWeb).
Part I: 16. Metabiota, Inc. (and the Ginkgo Bioworks Transfer)	Reported dollar figure(s) as transcribed	8. Institutional lineage. Founder Nathan Daniel Wolfe (b. 24 Aug. 1970), virologist, founded Global Viral in 2007 and founded Metabiota; Lorry I. Lokey Visiting Professor in Human Biology at Stanford; member of DARPA's Defense Science Research Council; his research funding exceeded $40 million from the U.S. Department of Defense, Google.org, NIH, the Skoll Foundation, the Bill & Melinda Gates Foundation and the National Geographic Society (Nathan Wolfe, Wikipedia).
Part I: 16. Metabiota, Inc. (and the Ginkgo Bioworks Transfer)	Reported dollar figure(s) as transcribed	12. Controversies, COI, anomalies. Two "REA SETTLEMENT" modifications (Requests for Equitable Adjustment) appear on the DTRA contract within seven months of award — an unusual density of claims activity for a $23.9 million R&D contract (USAspending record). Separately, files released by the U.S. Department of Justice in January 2026 under the Epstein Transparency Act — over 3.5 million files — contain Wolfe's name 589 times; the files show Wolfe sought research funding from Jeffrey Epstein for a study on microbial influences on sexual behavior, referring to it in a 2013 email as "our horny virus hypothesis"; Wolfe invited Epstein to a 2010 dinner party, acknowledged Epstein in his 2011 book The Viral Storm, and continued correspondence after Epstein's 2008 guilty plea. In February 2026 Wolfe stated the project was never pursued, that he never received funding from Epstein, that he met Epstein "professionally" at Epstein's New York and Palm Beach homes, "never visited his island or flew on his plane," and "never witnessed or participated in any misconduct," while acknowledging "overfamiliarity and poor judgment" (Nathan Wolfe, Wikipedia). Note: this Wikipedia summary cites The Stanford Daily; the underlying DOJ release and Stanford Daily article were not independently fetched in this session and should be verified directly before publication.
Part I: 17. Battelle Memorial Institute / Battelle National Biodefense Institute	Reported dollar figure(s) as transcribed	4. Total government funding. NBACC: a $480 million, 10-year cost-reimbursement hybrid contract combining Cost Plus Fixed Fee and Cost-Plus-Award-Fee terms [SECONDARY] (DHS/NBACC re-award notice). DTRA STEP 2.0: $52,876,517 hybrid FFP/T&M/cost-reimbursable base, with $9,500,000 of FY2025 CTR funds obligated at award, competitively awarded from four proposals, principal place of performance Columbus, Ohio [SECONDARY] (ClearanceJobs); a later report gives $52.9 million base and $93.3 million total potential value if all options are exercised, and separately notes a Battelle DoD electronics and software technology support contract with a $25.35 billion ceiling [SECONDARY] (The Defense Post, 26 Feb. 2026).

Part / profile	Figure classification	Source text with inline citation
Part I: 17. Battelle Memorial Institute / Battelle National Biodefense Institute	Reported dollar figure(s) as transcribed	8. Institutional lineage. STEP 2.0 succeeds the DTRA Scientific & Technical Engagement Partnership (STEP) program, for which Leidos was reported to hold a potential five-year, $170 million single-award contract for cooperative biological engagement/threat reduction [SECONDARY] (GovConWire).
Part I: 17. Battelle Memorial Institute / Battelle National Biodefense Institute	Reported dollar figure(s) as transcribed	12. Controversies. DHS's decision to re-award NBACC to the incumbent sole-source, based on "a comprehensive review of BNBI's performance," is a documented competition anomaly on a $480 million, 10-year instrument [SECONDARY] (DHS/NBACC re-award notice). No GAO or IG findings against Battelle were located in this session.
Part I: 19. Defense Threat Reduction Agency (DTRA) — the parent agency	Reported dollar figure(s) as transcribed	4. Total government funding. DTRA publishes audited consolidated financial statements in its Agency Financial Report; the FY2024 audit was performed by the independent public accounting firm Kearney & Company (DTRA FY2024 Agency Financial Report). The CTR line specifically requested $282.830 million for FY2026 against an FY2024 actual of $350.999 million (CTR OP-5, FY2026).
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	1. Name and aliases. Defense Logistics Agency; DLA; "the Pentagon's logistics agency"; a DoD "combat logistics support agency" (DLA, COVID-19 pivot). Relevant subordinate element: DLA Troop Support Medical supply chain (DLA, $803 million acquisition).
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	2. Active dates. The biodefense-relevant activity documented here runs from the 2020 COVID-19 national response through the December 2022 antigen-test acquisition, with deliveries continuing through April 2023 (DLA, COVID-19 pivot; DLA, $803 million acquisition).
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	3. Lead and funding agencies. DLA is the executing agency; HHS is the receiving customer for the antigen test kits replenishing the Strategic National Stockpile (SNS) (DLA, $803 million acquisition).
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	4. Total government funding. An indefinite delivery/indefinite quantity (IDIQ) contract awarded in November to four domestic vendors, worth up to $803 million over one year; the first purchase, in December 2022, was 180 million test kits for approximately $503.6 million, delivered to seven SNS warehouse locations (DLA, $803 million acquisition). Contract numbers, task-order numbers, solicitation numbers, and vendor names are not stated on the DLA page — an unusual omission for an $803 million award and a documented transparency gap.
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	7. Locations. Seven SNS warehouse locations nationwide; DLA support extended to "many foreign countries" through the State Department and USAID (DLA, $803 million acquisition; DLA, COVID-19 pivot).
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	11. Relationship to HHS/DoD components. Direct: DLA procured for and delivered into the HHS Strategic National Stockpile, serving states, tribal nations, territories and large metropolitan areas (DLA, $803 million acquisition). This is a documented instance of a DoD logistics agency acting as the acquisition arm for a civilian public-health stockpile.

Part / profile	Figure classification	Source text with inline citation
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. No IG or GAO finding on these DLA actions was located in the sources fetched. The anomaly is the absent contract identification noted in field 4 (DLA, $803 million acquisition).
Part I: 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics	Reported dollar figure(s) as transcribed	13. Key personnel. Bill Dulin, DLA Troop Support medical division chief; Tangela Randolph, DLA Troop Support; article by Christian Deluca, DLA Troop Support Public Affairs (DLA, $803 million acquisition). COVID-19 pivot article by Chris Erbe (DLA, COVID-19 pivot).
Part I: 25. Supporting contractor base — CTRIC/BTRIC prime and task-order holders	Reported dollar figure(s) as transcribed	2. Active dates. BTRIC awarded 2008 (approximately $4 billion potential value over ten years, five firms) [SECONDARY] (Defense Daily); CTRIC III awarded June 2018, $970 million ceiling, six firms [SECONDARY] (Washington Technology, 2018); CTRIC IV awarded August 2025, $3.5 billion ceiling [SECONDARY] (Washington Technology, Aug. 2025).
Part I: 25. Supporting contractor base — CTRIC/BTRIC prime and task-order holders	Reported dollar figure(s) as transcribed	- HDTRA114C0104 — Metabiota, Inc., 10 Feb. 2014-15 Nov. 2016, potential value $23,866,388, obligated $18,417,699.34 (USAspending contract record, Metabiota).
Part I: 25. Supporting contractor base — CTRIC/BTRIC prime and task-order holders	Reported dollar figure(s) as transcribed	- HDTRA1-26-C-0004 — Battelle, DTRA STEP 2.0, $52.9 million base / $93.3 million with options, completion 25 January 2031 [SECONDARY] (ClearanceJobs, 23 Jan. 2026).
Part I: 25. Supporting contractor base — CTRIC/BTRIC prime and task-order holders	Reported dollar figure(s) as transcribed	6. Entities involved. CTRIC III (June 2018, six firms): Black & Veatch, CH2M Hill (now Jacobs), PAE, Parsons, Raytheon, and URS/AECOM [SECONDARY] (Washington Technology, 2018). CTRIC IV (August 2025): Amentum, Black & Veatch, Fluor, Parsons, V2X and Jacobs [SECONDARY] (Washington Technology, Aug. 2025). Additional documented DTRA biological-mission awardees: Amentum — $51 million BTRP support [SECONDARY] (ExecutiveBiz) and $56.1 million for BTRP missions in Africa, December 2023 (Amentum); Leidos — potential $170 million DTRA counter-biological-threat award [SECONDARY] (GovConWire); CH2M — $35 million biosafety/biosecurity contract, November 2016 [SECONDARY] (Global Biodefense); Bechtel — DTRA biological threat reduction work in Uzbekistan (Bechtel press release); Battelle — U.S. biohazard control work, February 2026 [SECONDARY] (The Defense Post, 26 Feb. 2026); BioFire Defense, LLC — NGDS major contractor (DOT&E FY2018 NGDS report). Ukrainian-side subcontractors documented on U.S. Embassy fact sheets include the Vinnytsia Design Institute, Lviv Proekt Institute, RK-Center, and Biolabtech (Vinnytsia IRL fact sheet; Lviv LRIEH fact sheet).
Part I: 25. Supporting contractor base — CTRIC/BTRIC prime and task-order holders	Reported dollar figure(s) as transcribed	- SIGAR 21-08-FA: of $6,649,119 in audited costs on CH2M Hill's CBEP task order TO 0006 under HDTRA1-08-D-0008, SIGAR questioned $4,418,512 — approximately 66 percent — including $4,062,985 of ineligible subcontract costs, with sole-source justification failures identified on 127 of 135 transactions reviewed (SIGAR 21-08-FA).

Part / profile	Figure classification	Source text with inline citation
Part I: 25. Supporting contractor base — CTRIC/BTRIC prime and task-order holders	Reported dollar figure(s) as transcribed	- Ceiling escalation anomaly: the vehicle ceiling fell from roughly $4 billion (BTRIC, 2008) to $970 million (CTRIC III, 2018) and then rose to $3.5 billion (CTRIC IV, 2025) — a 3.6× increase in stated contracting capacity at the same time the CTR appropriation was declining from $350.999 million actual in FY2024 to a $282.830 million request for FY2026 (Defense Daily; Washington Technology, 2018; Washington Technology, Aug. 2025; CTR OP-5, FY2026). Ceiling is capacity, not obligation, but the divergence is a documented anomaly worth tracking in FPDS.
Part II: Cluster Summary	Reported dollar figure(s) as transcribed	Between 2009 and 2026 the U.S. Agency for International Development built, operated, defunded, rebuilt, and then largely dismantled a global zoonotic-virus discovery and surveillance apparatus that ran on four successive vehicles: the Emerging Pandemic Threats program (EPT, 2009–2014) and its four projects PREDICT, PREVENT, IDENTIFY and RESPOND (USAID EPT Fact Sheet); EPT-2 (2014–2019), a five-year $360 million follow-on (USAID EPT-2 External Evaluation, Contract AID-OAA-C-14-00067); STOP Spillover (2020–2025), announced as a five-year $100 million award to Tufts (USAID press release, 30 Sept. 2020); and DEEP VZN (2021–2024), a ~$125 million viral-discovery program at Washington State University that was cancelled after roughly ten percent of promised funding (Science, 2023). PREDICT alone consumed more than $200 million across 2009–2020, strengthened laboratories in more than 60 countries, trained over 6,000 people, and detected more than 1,100 unique viruses (Science).
Part II: Cluster Summary	Reported dollar figure(s) as transcribed	The money flowed through a small, stable set of institutions. The University of California, Davis One Health Institute held the prime cooperative agreements; the two largest subrecipients across PREDICT-2 were EcoHealth Alliance ($44,442,238) and Metabiota, Inc. ($30,853,783) (USAspending subaward API, PREDICT-2 award AID-OAA-A-14-00102). EcoHealth Alliance — a New York nonprofit founded in 1971 as the Wildlife Preservation Trust International and rebranded in September 2010 (EcoHealth Alliance) — simultaneously held $71.6 million in federal grants and $10.3 million in federal contracts across NIH, USAID, DTRA, DHS, NOAA, CDC and USGS (USAspending API), and routed $598,500 of NIAID grant R01AI110964 to the Wuhan Institute of Virology (USAspending subaward API). Metabiota, Inc. — incorporated in California and formerly named Global Viral Forecasting, Inc. and Epintel, Inc. per its own SEC Form D filings (SEC Form D, 21 May 2015) — held $22.2 million in federal contracts and $39.7 million in federal grants, took strategic investment from the CIA's venture arm In-Q-Tel in August 2017 (PRWeb, 22 Aug. 2017 — SECONDARY), and ended as an asset sale to Ginkgo Bioworks for $11.1 million in August 2022 (Ginkgo Bioworks Form 10-Q, 14 Nov. 2022).

Part / profile	Figure classification	Source text with inline citation
Part II: Cluster Summary	Reported dollar figure(s) as transcribed	The oversight record is documented and severe. GAO found NIH-funded second-tier subawards reaching Chinese entities through EcoHealth Alliance under a USAID cooperative agreement (GAO-23-106119). HHS OIG questioned $89,171 in EcoHealth costs and found NIH failed to chase a late progress report for nearly two years (HHS OIG A-05-21-00025). DoD IG recorded DTRA self-identifying $46.7 million in 13 projects awarded to EcoHealth Alliance from 2014 to 2023 (DODIG-2024-099). HHS debarred Dr. Peter Daszak for five years on 17 January 2025, ineligible through 20 May 2029 (HHS Notice of Debarment).
Part II: USAID Emerging Pandemic Threats (EPT) Program — Phase 1	Reported dollar figure(s) as transcribed	4. Total government funding. EPT-1 total: UNVERIFIED — no primary source located for a consolidated Phase 1 obligation figure. The Wildlife Conservation Society announcement of PREDICT stated "incremental funding of up to $75 million over 5 years" for PREDICT alone (WCS, 23 Oct. 2009). EPT-2 was a $360 million five-year program (EPT-2 Evaluation).
Part II: PREDICT (Phase 1, 2009–2014)	Reported dollar figure(s) as transcribed	4. Total government funding. WCS's 2009 announcement described " incremental funding of up to $75 million over 5 years" (WCS). Across both phases PREDICT received more than $200 million (Science). Actual PREDICT-1 obligations: UNVERIFIED — no primary source located.
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	4. Total government funding. $137,062,397 per USAspending's award record (USAspending). UC Davis's own grants page describes the overall five-year award as $138.4 million, with a quarterly increment of $11,600,000 (UC Davis SVM) — a $1.34 million discrepancy between the recipient's stated ceiling and the federally reported obligated total, most plausibly explained by deobligation at closeout, but not reconciled by any document located this session.
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| EcoHealth Alliance | $44,442,238 | US nonprofit, core partner |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Metabiota, Inc. | $30,853,783 | US for-profit, core partner |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Smithsonian Institution | $3,462,488 | US federal trust instrumentality |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Mountain Gorilla Veterinary Project (MGVP) | $3,067,743 | US nonprofit |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Wildlife Conservation Society | $2,956,942 | US nonprofit |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Columbia University | $2,007,066 | US university |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Institut Pasteur du Cambodge | $1,859,926 | Foreign institute (Cambodia) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Center for Molecular Dynamics Nepal | $1,851,323 | Foreign NGO (Nepal) |

Part / profile	Figure classification	Source text with inline citation
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| University of Makeni | $1,491,305 | Foreign university (Sierra Leone) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Sokoine University of Agriculture | $1,300,274 | Foreign university (Tanzania) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Viral Hemorrhagic Fever (VHF) Program | $1,017,842 | Foreign program |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Ifakara Health Institute | $835,752 | Foreign institute (Tanzania) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Noguchi Memorial Institute for Medical Research | $814,518 | Foreign institute (Ghana) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Université Cheikh Anta Diop (UCAD) | $653,263 | Foreign university (Senegal) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Labyrinth Global Health | $337,004 | US for-profit |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| EISMV (Ecole Inter-États des Sciences et Médecine Vétérinaires) | $322,747 | Foreign institute (Senegal) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| ISRA (Institut Sénégalais de Recherches Agricoles) | $305,476 | Foreign institute (Senegal) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Ghana Veterinary Services | $301,186 + $212,318 | Foreign government |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Addis Ababa University | $249,997 | Foreign university (Ethiopia) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Ghana Wildlife Division | $129,065 + $31,138 | Foreign government |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Royal University of Agriculture | $74,536 | Foreign university (Cambodia) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Children's Hospital Corporation | $46,807 | US hospital (HealthMap) |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Georgetown University | $33,313 | US university |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	| Johns Hopkins University | $32,750 | US university |
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	8. Institutional lineage. Direct successor to PREDICT-1 under the same prime, same PI and largely the same consortium. Parallel/companion award: One Health Workforce, award AIDOAAA1500014, University of Minnesota, $60,207,194 (USAspending API); successor One Health Workforce – Next Generation, award 7200AA19CA00018, UC Davis, $57,601,341, 1 October 2019 – 30 September 2025 (USAspending).

Part / profile	Figure classification	Source text with inline citation
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	9. Products, companies, spinoffs. No direct spinoff. Metabiota's participation as a $30.9 million subrecipient supplied part of the epidemiological data asset base later sold to Ginkgo Bioworks (Ginkgo 10-Q).
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	10. Intelligence Community relationship. No verified link found between PREDICT-2 and any IC element. Note for the record that Metabiota, a $30.9 million PREDICT-2 subrecipient, signed a strategic agreement with In-Q-Tel in August 2017 — mid-performance on this award (PRWeb — SECONDARY). No document located this session establishes IC access to PREDICT-2 data.
Part II: PREDICT-2 (2014–2020)	Reported dollar figure(s) as transcribed	12. Controversies, oversight findings, anomalies. (a) The $1.34 million gap between UC Davis's stated $138.4M ceiling and the $137,062,397 federal record (sources above). (b) GAO's documented USAID → EcoHealth → Chinese-entity second-tier subaward chain (GAO-23-106119). (c) GAO further recorded that a UC Irvine subaward to the Wuhan Institute of Virology was suspended in May 2020 at NIH's direction over biosafety concerns, and a Regents of the University of California subaward was terminated (same source). (d) Program termination in 2020 immediately preceded the COVID-19 policy environment in which its principal subrecipient became the subject of federal debarment.
Part II: RESPOND (EPT Project)	Reported dollar figure(s) as transcribed	2. Active dates and lifecycle. EPT Phase 1, 2009–2014 (USAID Fact Sheet; WCS). Functionally succeeded under EPT-2 by the One Health Workforce award, University of Minnesota, AIDOAAA1500014, $60,207,194 (USAspending API), and thereafter One Health Workforce – Next Generation, UC Davis, 7200AA19CA00018, $57,601,341 (USAspending).
Part II: PREVENT (EPT Project)	Reported dollar figure(s) as transcribed	8. Institutional lineage. FHI 360's PREVENT role is the direct antecedent of FHI 360 appearing as a DEEP VZN subrecipient at $1,475,103.87 (USAspending subaward API for award 7200AA21CA00033).
Part II: PREVENT (EPT Project)	Reported dollar figure(s) as transcribed	11. HHS/NIH and DoD relationship. CDC technical assistance across EPT (USAID Fact Sheet). DoD: no verified link found at project level; implementer Metabiota held $18,417,699.34 in DTRA contract HDTRA114C0104 running 10 February 2014 – 15 November 2016, overlapping the EPT period (USAspending).
Part II: PREVENT (EPT Project)	Reported dollar figure(s) as transcribed	12. Controversies, oversight findings, anomalies. The overlap is the anomaly: the same for-profit entity simultaneously held a USAID public-health behavioral-risk contract targeting extractive-industry workers in hotspot countries and an $18.4 million DTRA contract, while marketing epidemic-risk analytics to Munich Re and taking In-Q-Tel investment (sources above and below).
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	4. Total government funding. Announced as a five-year, $100 million project (USAID). Actually obligated per the federal record: $31,159,947 (USAspending). That is approximately 31 percent of the announced ceiling — a material gap between public announcement and executed obligation, and one of the clearest funding anomalies in this cluster.
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| AFROHUN | $4,957,012.00 |

Part / profile	Figure classification	Source text with inline citation
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| JSI Research and Training Institute | $3,923,390.10 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| ARD, Inc. (Tetra Tech ARD) | $3,327,279.53 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| University of Washington | $1,831,694.29 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| icddr,b | $1,070,870.48 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| Hanoi University of Public Health | $742,066.00 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| University of California, Los Angeles | $676,212.54 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| SEAOHUN | $669,404.00 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| John Snow, Inc. | $620,000.00 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| Broad Institute | $431,152.00 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| University of Glasgow | $191,000.16 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| Internews | $125,008.00 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| Humanitarian OpenStreetMap Team | $116,449.53 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| Right Track Africa | $115,623.00 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	| University of Nebraska | $55,174.00 |
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	7. Locations. Prime: Tufts University, Massachusetts. Country programs: Bangladesh, Cambodia, Côte d'Ivoire, Liberia, Sierra Leone, Uganda, Viet Nam (USAID). Note the subaward to Hanoi University of Public Health ($742,066) confirming Vietnamese institutional participation (USAspending subaward API).
Part II: USAID STOP Spillover (2020–2025)	Reported dollar figure(s) as transcribed	12. Controversies, oversight findings, anomalies. The $100 million announced vs. $31.2 million obligated gap (sources above). No GAO or IG report specific to STOP Spillover located this session.

Part / profile	Figure classification	Source text with inline citation
Part II: USAID DEEP VZN (2021–2024)	Reported dollar figure(s) as transcribed	4. Total government funding. Announced at approximately $125 million over five years (PATH). Actually obligated: $11,532,810 (USAspending) — approximately 9.2 percent of the announced ceiling, consistent with Science's report that the program received about ten percent of promised funding (Science).
Part II: USAID DEEP VZN (2021–2024)	Reported dollar figure(s) as transcribed	| University of Washington | $3,693,486.53 |
Part II: USAID DEEP VZN (2021–2024)	Reported dollar figure(s) as transcribed	| FHI 360 | $1,475,103.87 |
Part II: USAID DEEP VZN (2021–2024)	Reported dollar figure(s) as transcribed	| PATH | $1,404,747.53 |
Part II: USAID DEEP VZN (2021–2024)	Reported dollar figure(s) as transcribed	| Washington University in St. Louis | $554,658.30 |
Part II: USAID DEEP VZN (2021–2024)	Reported dollar figure(s) as transcribed	7. Locations. Prime: Pullman, Washington. Planned scope: up to 12 countries (PATH). Guy Palmer of Washington State University stated the program never obtained permission to work in any of its five initial countries (Science) — meaning approximately $11.5 million was obligated to a viral-discovery program that never gained host-country access.
Part II: USAID DEEP VZN (2021–2024)	Reported dollar figure(s) as transcribed	12. Controversies, oversight findings, anomalies. (a) ~$11.5 million obligated against a $125 million announcement with zero host-country access obtained (sources above). (b) Cancellation in July 2023 occurred against the backdrop of congressional scrutiny of U.S.-funded virus-discovery work; Dennis Carroll, the original architect of USAID's EPT program, was quoted in coverage of the cancellation (Science). (c) No GAO or IG report specific to DEEP VZN located this session.
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	Federal contracts — 9 awards totaling $10,348,193.46 (USAspending API):
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA115C0041 | DTRA | $4,479,678.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA113C0029 | DTRA | $2,225,134.50 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| DOCWC133F06CN0251 | NOAA | $1,241,932.80 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HSHQDC16C00113 ("GROUND TRUTH") | DHS | $974,297.67 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 70RSAT18CB0031001 | DHS | $700,582.55 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 70RSAT19CB0000013 ("REPEL") | DHS | $566,274.26 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HHSD2002011M41641P ("BUSHMEAT") | CDC | $99,293.68 |

Part / profile	Figure classification	Source text with inline citation
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| ING04ERSA0526 | USGS | $61,000.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA120C0055 | DTRA | $0.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	Federal grants — 34 awards totaling $71,597,965.44 (USAspending API), principal awards:
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 72066921CA00006 "Conservation Works" | USAID | $13,190,000.00 (terminated 15 Aug. 2024) |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA11710064 | DTRA | $6,491,024.66 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA11910033 | DTRA | $4,988,193.06 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA11410029 | DTRA | $4,936,322.39 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| U01AI151797 | NIH/NIAID | $4,823,569.21 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA12010029 | DTRA | $3,924,953.46 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| R01TW005869 | NIH Fogarty | $3,725,160.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA12010016 | DTRA | $3,692,697.72 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA12010018 | DTRA | $3,681,713.54 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| R01AI110964 "Understanding the Risk of Bat Coronavirus Emergence" | NIH/NIAID | $3,537,360.32 (1 June 2014 – 30 Apr. 2024) |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| R01AI079231 | NIH/NIAID | $2,579,553.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| AID486A1300005 | USAID | $2,499,147.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA11710037 | DTRA | $2,121,776.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| U01AI153420 | NIH/NIAID | $2,015,919.38 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA12010026 | DTRA | $1,685,472.65 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HDTRA12310006 | DTRA | $1,534,289.52 |

Part / profile	Figure classification	Source text with inline citation
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| HU00012010031 | Uniformed Services University | $1,360,002.00 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	4. Total government funding. Direct federal awards captured in USAspending: $81,946,158.90 ($10,348,193.46 contracts + $71,597,965.44 grants) (USAspending API). This excludes subaward income, which is substantial: EcoHealth received $44,442,238 as a PREDICT-2 subrecipient alone (USAspending subaward API). Separately, DoD IG recorded that DTRA self-identified 13 projects totaling $46.7 million awarded to EcoHealth Alliance Inc. between 2014 and 2023, and additionally reported $7.4 million to EcoHealth for work on faster pinpointing of disease threats (DODIG-2024-099). Total organizational revenue by fiscal year from IRS Form 990 filings (ProPublica):
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2023 | $17,892,678 | $18,954,925 | $15,827,483 | $17,892,523 | $1,956,369 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2022 | $14,230,571 | $14,795,602 | $10,848,699 | $14,088,934 | $1,873,926 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2021 | $11,774,215 | $10,794,892 | $11,707,153 | $11,465,094 | $1,872,601 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2020 | $11,328,705 | $10,026,662 | $9,676,830 | $10,641,003 | $1,531,252 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2019 | $17,946,676 | $16,554,239 | $8,579,062 | $17,703,253 | $1,475,833 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2018 | $16,432,816 | $16,210,913 | $7,139,194 | $16,013,638 | $1,428,170 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2017 | $13,999,034 | $13,652,783 | $6,861,667 | $13,712,182 | $1,317,006 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2016 | $11,940,785 | $11,374,843 | $6,706,640 | $11,527,725 | $978,383 |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2015 | $10,119,093 | $9,408,737 | — | — | — |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2014 | $8,976,488 | $8,908,236 | — | — | — |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2013 | $8,712,682 | $8,362,573 | — | — | — |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2012 | $8,278,218 | $7,887,915 | — | — | — |
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	| 2011 | $9,554,358 | $8,747,752 | — | — | — |

Part / profile	Figure classification	Source text with inline citation
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	Anomaly worth flagging: in FY2023, government grants and contributions of $17,892,523 account for 99.997 percent of total revenue of $17,892,678 — EcoHealth Alliance was, in financial substance, a wholly government-funded entity. Officer compensation rose every single year from $978,383 (2016) to $1,956,369 (2023), a 100 percent increase over seven years, including through the years the organization was under active congressional and IG investigation.
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	6. Entities involved and roles. As a subrecipient: PREDICT-2 under UC Davis ($44,442,238) (USAspending subaward API). As a prime passing funds onward: under NIAID grant R01AI110964, EcoHealth Alliance made subawards to the Wuhan Institute of Virology totaling $598,500 ($133,000 each in 2015, 2016, 2017 and 2018, plus $66,500 in 2019) and to the Wuhan University School of Public Health totaling $201,217.10 (USAspending subaward API). GAO independently recorded three subawards to WIV totaling $1,413,720, two subawards to Wuhan University totaling $240,496, and two subawards to the Academy of Military Medical Sciences / Beijing Institute of Microbiology and Epidemiology totaling $514,129 across the seven subawards it reviewed, of which two were second-tier subawards from EcoHealth under a USAID cooperative agreement (GAO-23-106119). The AMMS/Beijing Institute of Microbiology and Epidemiology is an arm of the Chinese military's medical research establishment — its appearance in a U.S.-funded subaward chain is one of the most consequential documented findings in this cluster.
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- NIH/NIAID: grant R01AI110964, "Understanding the Risk of Bat Coronavirus Emergence," PI Peter Daszak, $3,537,360.32 total, 1 June 2014 – 30 April 2024 (USAspending). NIH RePORTER fiscal-year obligations under this award: FY2014 $666,442; FY2015 $630,445; FY2016 $611,090; FY2017 $597,112; FY2018 $581,646; FY2019 (renewal 2R01AI110964-06) $661,980; FY2023 (5R01AI110964-07) $576,290 (NIH RePORTER API, https://api.reporter.nih.gov/v2/projects/search). Also U01AI151797 ($4,823,569.21) and U01AI153420 ($2,015,919.38, PI Jonathan H. Epstein), and Fogarty R01TW005869 ($3,725,160) (USAspending API; NIH RePORTER API).
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- DTRA: at least 13 grant and contract instruments in the USAspending record (HDTRA1-series above), independently corroborated by DoD IG's record of DTRA self-identifying 13 projects totaling $46.7 million to EcoHealth Alliance, 2014–2023, with DTRA reporting that none of that funding was allocated to China (DODIG-2024-099).
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- Uniformed Services University: grant HU00012010031, $1,360,002 (USAspending API).
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- DHS: four contracts totaling $2,241,154.48 (USAspending API).
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- CDC: contract HHSD2002011M41641P "BUSHMEAT," $99,293.68 (USAspending API).

Part / profile	Figure classification	Source text with inline citation
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- HHS OIG A-05-21-00025 (January 2023), Inspector General Christi A. Grimm. Audited three NIH awards to EcoHealth Alliance totaling approximately $8.0 million, including $1.8 million in subawards to eight subrecipients, among them the Wuhan Institute of Virology; reviewed 150 transactions totaling $2,578,567. Findings: NIH did not effectively monitor the awards; NIH failed to follow up on a late progress report until nearly two years after its due date; NIH improperly terminated a grant; EcoHealth Alliance was unable to obtain scientific documentation from WIV. The audit identified $89,171 in unallowable costs and made 15 recommendations (HHS OIG A-05-21-00025; Oversight.gov summary).
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- GAO-23-106119 (June 2023), "NIH Could Take Additional Actions to Manage Risks Involving Foreign Subrecipients," GAO contact Candice N. Wright. Found NIH gave $200,000 directly to Wuhan University after an award originally issued to the Institut Pasteur of Shanghai ($310,230 disbursed March 2015 – January 2018) was transferred in 2018; documented seven subawards to three Chinese entities as itemized above; found that two of the seven were second-tier subawards funded through a USAID cooperative agreement and provided by first-tier subrecipient EcoHealth Alliance; and recorded that a UC Irvine subaward to WIV was suspended in May 2020 at NIH's direction over biosafety concerns and that a Regents of the University of California subaward was terminated (GAO-23-106119).
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- DODIG-2024-099 (20 June 2024), a management advisory issued under Public Law 118-31 § 252, Inspector General Robert P. Storch. Recorded DTRA's $46.7 million / 13 projects to EcoHealth 2014–2023, DTRA's report of $7.4 million to EcoHealth for faster disease-threat pinpointing, and separately the Army's self-identification of 7 CDMRP grants totaling $15.6 million and 5 awards totaling $9.9 million to Chinese entities (DODIG-2024-099).
Part II: EcoHealth Alliance, Inc.	Reported dollar figure(s) as transcribed	- Award termination. USAID cooperative agreement 72066921CA00006 ("Conservation Works," $13,190,000) carries a termination date of 15 August 2024 in the federal record (USAspending API) — i.e., EcoHealth's largest single USAID prime award was cut short during the debarment proceedings.
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	Federal contracts — 6 awards totaling $22,163,510.88 (USAspending API):
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| HDTRA114C0104 | DTRA | $18,417,699.34 | 10 Feb. 2014 – 15 Nov. 2016 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| HDTRA112C0024 | DTRA | $3,155,466.35 | |

Part / profile	Figure classification	Source text with inline citation
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| HSHQDC13CB0048 | DHS | $349,512.84 | |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| W81XWH11P0752 | U.S. Army | $149,832.35 | |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| HSHQDC10P00100 | DHS | $90,000.00 | 2010; performer of record " GLOBAL VIRAL FORECASTING, INC."; PM Nels Olson |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| 0001 | U.S. Army | $1,000.00 | |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	Metabiota also appears on Army indefinite-delivery vehicle W911QY18D0174 (JE-RDAP) with a ceiling of $8.27 billion (USAspending API) — a shared multiple-award ceiling, not a Metabiota-specific obligation.
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	Federal grants — 20 awards totaling $39,732,243.36 (USAspending API), principal awards:
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441410067 | U.S. Navy | $4,780,872.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441910002 | U.S. Navy | $4,598,516.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| W81XWH2120046 | Defense Health Agency | $3,500,038.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441910015 | DCMA/Navy | $3,164,077.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441510067 | U.S. Navy | $2,999,522.00 |

Part / profile	Figure classification	Source text with inline citation
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| HDTRA11410053 | DTRA | $2,794,986.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| NU2GGH001800 | CDC | $2,687,382.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002440910008 | U.S. Navy | $2,547,978.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441710015 | U.S. Navy | $1,822,700.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| RC2CA148534 | NIH | $1,813,010.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| HDTRA11410052 | DTRA | $1,602,512.36 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441410013 | U.S. Navy | $1,490,000.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441510066 | U.S. Navy | $1,347,000.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| DP1OD000370 (NIH Director's Pioneer Award) | NIH | $1,331,526.00 (30 Sept. 2005 – 31 July 2012) |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| U2GGH001800 | CDC | $1,170,000.00 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| N002441320001 | U.S. Navy | $649,882.00 |

Part / profile	Figure classification	Source text with inline citation
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| SLMAQM10GR073 | U.S. Department of State | $585,361.00 (Pakistan / Malaysia / Africa) |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	4. Total government funding. Direct federal awards captured in USAspending: $61,895,754.24 ($22,163,510.88 contracts + $39,732,243.36 grants) (USAspending API). Plus $30,853,783 received as a PREDICT-2 subrecipient (USAspending subaward API). Combined documented federal funding: approximately $92.7 million. A materially different figure circulates in secondary sources: a wiki-style secondary reference states Metabiota "received a $23 million contract with the United States Department of Defense for work between February 2014 and November 2016" (White Rose Intelligence — SECONDARY); the federal record for the contract in question, HDTRA114C0104 covering exactly that period, shows $18,417,699.34 (USAspending API). Use the federal figure.
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	8. Institutional lineage. Global Viral Forecasting, Inc. → Epintel, Inc. → Metabiota, Inc. per the company's own SEC filings (SEC Form D 2015). Its founder Nathan D. Wolfe also founded the nonprofit Global Viral Forecasting Institute / Global Viral, a 501(c)(3) in San Francisco, in 2007, seed-funded in 2008 by Google and the Skoll Foundation (Wikipedia: Global Viral — SECONDARY; Wikipedia: Nathan Wolfe — SECONDARY). Holding-company reorganization into Baktus, Inc. occurred in 2021; Baktus reported first sale on 30 September 2021, raising $7,500,000 from 64 investors, with Michael Kertesz as Chief Executive Officer and Director and Nathan D. Wolfe as Executive Officer and Director (Baktus Form D). Successor of the operating assets: Ginkgo Bioworks' Concentric biosecurity unit (PR Newswire).
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| 24 Dec. 2013 | 13 Dec. 2013 | $1,050,000 | 7 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| 20 Mar. 2014 | 7 Mar. 2014 | $2,380,585 (includes securities issued on conversion of outstanding convertible promissory notes plus cash consideration) | 12 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| 21 May 2015 | 23 Dec. 2014 | $30,199,999 | 24 |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| 24 Dec. 2013 | Series Seed | $2.88MM | $0.38 | $17MM | Rosemont Seneca Technology Partners (RSTP), Tao Venture Capital Partners, The Data Collective and others |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| 21 May 2015 | Series A | $31.2MM | $1.44 | $89MM | Capricorn Healthcare, Capricorn Investment Group, Google Ventures, Industry Ventures, Rosemont Seneca Technology Partners, Sharespost, The Data Collective, WP Global Partners |

Part / profile	Figure classification	Source text with inline citation
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	| 7 Mar. 2017 | Series B | $8.02MM | $1.84 | $156.11MM | In-Q-Tel, Sharespost, WP Global Partners |
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	Note the discrepancy: the Forge Global secondary dataset attributes the $31.2MM Series A to 21 May 2015 and the $2.88MM seed to 24 Dec. 2013, while the corresponding SEC Form D filings (the primary records filed on the same dates) report $30,199,999 and $1,050,000 sold respectively. Where Forge and SEC disagree, the SEC Form D is the primary record.
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	Exit. On 19 August 2022, Ginkgo Bioworks announced the purchase of " certain epidemiological data infrastructure assets" from Baktus, Inc., a Delaware public benefit corporation and parent of Metabiota, Inc.; Metabiota CEO Nita Madhav joined Ginkgo's Concentric team as part of the transaction (PR Newswire). Ginkgo's audited disclosure gives exact terms: the transaction was accounted for as an asset acquisition, with a purchase price totaling $11.1 million, consisting of $2.0 million in cash, 2,587,819 shares of Ginkgo Class A common stock valued at $8.4 million, and $0.7 million in direct transaction costs; 258,781 of the shares issued were restricted, vesting on the 18-month anniversary of closing and reducible by indemnity claims; the agreement additionally included $1.0 million in employee retention payments. Ginkgo recognized $11.2 million in intangible assets (developed technology, customer relationships and assembled workforce) and $0.1 million in deferred revenue (Ginkgo Bioworks Form 10-Q for the quarter ended 30 September 2022).
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	10. Intelligence Community relationship. Documented, but through a press release rather than a government filing. On 22 August 2017, Munich Re and In-Q-Tel, Inc. (IQT) — the CIA-affiliated strategic investor — announced strategic agreements with Metabiota; the release carries a quote from Eugene Chiu, Partner, Investments at In-Q-Tel, names Metabiota's then-CEO as Bill Rossi, and states Metabiota had offices in San Francisco, Canada, Sierra Leone, Cameroon and the DRC with operations in nearly 20 countries (PRWeb — SECONDARY). Secondary-market data independently lists In-Q-Tel as a Series B investor at $1.84/share on 7 March 2017 (Forge Global — SECONDARY) — five months before the public announcement. No primary government document, In-Q-Tel filing, or SEC filing disclosing the In-Q-Tel investment amount was located this session; the two corroborating sources are both secondary. No ODNI, NIC, NSC or NCMI relationship located: no verified link found.

Part / profile	Figure classification	Source text with inline citation
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- DTRA: contracts HDTRA114C0104 ($18,417,699.34) and HDTRA112C0024 ($3,155,466.35), plus grants HDTRA11410053 ($2,794,986) and HDTRA11410052 ($1,602,512.36) (USAspending API). Additionally, on 8 August 2018 Metabiota announced subcontracts from Black & Veatch supporting DTRA's Cooperative Biological Engagement Program (CBEP): a BTRIC (Biological Threat Reduction Integrating Contract) task in Iraq worth up to $900,000 over 18 months; a BTRIC Cameroon task worth $450,000 with LANAVET; and a CTRIC III (Cooperative Threat Reduction Integrating Contract III, an ID/IQ with a $970 million ceiling) Task Order 02 in Senegal at the National Public Health Laboratory in Thiès worth approximately $600,000. The announcement quotes Mary Guttieri, Executive Vice President of Science and Microbiology (Business Insider Markets reprint — SECONDARY).
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- U.S. Navy: eight grants (N00244-series) totaling $18,600,555 (USAspending API) — the largest single-agency source of Metabiota grant funding, exceeding even DTRA.
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- Defense Health Agency: W81XWH2120046, $3,500,038 (USAspending API). U.S. Army: W81XWH11P0752, $149,832.35 (USAspending API).
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- NIH: DP1OD000370, an NIH Director's Pioneer Award of $1,331,526 running 30 September 2005 – 31 July 2012 to Nathan Wolfe, and RC2CA148534, $1,813,010 (USAspending API).
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- CDC: NU2GGH001800 ($2,687,382) and U2GGH001800 ($1,170,000) (USAspending API). DHS: HSHQDC13CB0048 ($349,512.84) and HSHQDC10P00100 ($90,000) (USAspending API).
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- Department of State: SLMAQM10GR073, $585,361, covering Pakistan, Malaysia and Africa (USAspending API).
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- Simultaneous roles. Metabiota concurrently held USAID public-health subawards ($30.9M under PREDICT-2), DTRA biological-threat-reduction contracts ($18.4M+), Navy research grants ($18.6M), a Department of State grant, a commercial reinsurance analytics business with Munich Re, and CIA-linked venture investment from In-Q-Tel (sources above). No document located this session shows a conflict-of-interest firewall or disclosure regime governing that overlap. UNVERIFIED — no primary source located on any COI review.

Part / profile	Figure classification	Source text with inline citation
Part II: Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.)	Reported dollar figure(s) as transcribed	- No bankruptcy. No bankruptcy filing, receivership, or Chapter 7/11 petition for Metabiota, Inc. or Baktus, Inc. was located this session. The company's terminal event was an asset sale at $11.1 million (Ginkgo 10-Q) — a figure that should be compared against the $156.11 million post-money valuation implied by its March 2017 Series B (Forge Global — SECONDARY). On those two figures the enterprise lost roughly 93 percent of its notional peak private valuation.
Part II: Global Viral / Global Viral Forecasting Institute (nonprofit) and Nathan Wolfe	Reported dollar figure(s) as transcribed	11. HHS/NIH and DoD relationship. Founder Wolfe held NIH Director's Pioneer Award DP1OD000370 ($1,331,526, 2005–2012) through Metabiota's federal recipient identity (USAspending API) and, per secondary sourcing, sat on the DARPA Defense Science Research Council (Wikipedia — SECONDARY).
Part II: University of California, Davis One Health Institute	Reported dollar figure(s) as transcribed	3. Lead and funding agencies; award IDs. USAID awards AID-OAA-A-14-00102 (PREDICT-2, $137,062,397) and 7200AA19CA00018 (OHW-Next Gen, $57,601,341), plus legacy PREDICT-1 cooperative agreement GHN-A-OO-09-00010 (USAspending; USAspending; Springer/EcoHealth).
Part II: University of California, Davis One Health Institute	Reported dollar figure(s) as transcribed	4. Total government funding. From the two USAspending-recorded USAID prime awards alone: $194,663,738 ($137,062,397 + $57,601,341) (USAspending API).
Part II: University of California, Davis One Health Institute	Reported dollar figure(s) as transcribed	12. Controversies, oversight findings, anomalies. As PREDICT-2 prime, UC Davis sat at the top of the funding chain GAO traced to Chinese entities: USAID cooperative agreement → UC Davis (prime) → EcoHealth Alliance (first-tier subrecipient) → Chinese entities (second-tier subrecipients) (GAO-23-106119). Plus the $1.34 million discrepancy between UC Davis's stated $138.4M PREDICT-2 award and the $137,062,397 federal record (sources above).
Part II: Wildlife Conservation Society (PREDICT partner)	Reported dollar figure(s) as transcribed	4. Total government funding. PREDICT-2 subawards recorded at $2,956,942 to WCS, $3,067,743 to the Mountain Gorilla Veterinary Project, and $1,017,842 to the VHF Program (USAspending subaward API). WCS's 2009 release described PREDICT overall as carrying " incremental funding of up to $75 million over 5 years" (WCS newsroom).
Part II: Smithsonian Institution (PREDICT partner)	Reported dollar figure(s) as transcribed	4. Total government funding. $3,462,488 in recorded PREDICT-2 subawards (USAspending subaward API).
Part II: Columbia, Harvard, Princeton and HealthMap (PREDICT academic partners)	Reported dollar figure(s) as transcribed	4. Total government funding. Recorded PREDICT-2 subawards: Columbia University $2,007,066; Children's Hospital Corporation (HealthMap host) $46,807; Georgetown University $33,313; Johns Hopkins University $32,750 (USAspending subaward API). No PREDICT-2 subaward to Princeton or Harvard was located in the USAspending subaward records reviewed — no verified figure found.

Part / profile	Figure classification	Source text with inline citation
Part II: Register of Claims That Could Not Be Verified	Reported dollar figure(s) as transcribed	1. "Metabiota merged with a SPAC named Cerberus Telesystems (c. 2021)." — UNVERIFIED — no primary source located; affirmatively contradicted by the SEC record. A full-text search of SEC EDGAR returned zero filings containing the phrase "Cerberus Telesystems" (EDGAR full-text search API, https://efts.sec.gov/LATEST/search-index, queried 12 Aug. 2026). No entity by that name appears in the EDGAR company database. What the primary record does show is a September 30, 2021 merger of Metabiota, Inc. into Baktus Acquisition Corporation, a subsidiary of the Delaware holding company Baktus, Inc. — a private reorganization, not a SPAC transaction. Baktus, Inc. filed a Form D on 24 November 2021 reporting $7,500,000 sold to 64 investors, first sale 30 September 2021, with Michael Kertesz as CEO/director and Nathan D. Wolfe as executive officer/director, address 328 Trenton Way, Menlo Park, California (Baktus Form D).
Part II: Register of Claims That Could Not Be Verified	Reported dollar figure(s) as transcribed	3. "Hunter Biden / Rosemont Seneca Technology Partners directed Metabiota funding into Ukrainian biolabs." — UNVERIFIED — no primary source located. The verifiable core is narrow: Rosemont Seneca Technology Partners appears as a key investor in Metabiota's Series Seed (12/24/2013, $2.88MM, $0.38/share, $17MM post-money) and as lead investor in the Series A (05/21/2015, $31.2MM, $1.44/share, $89MM post-money) (Forge Global — SECONDARY, private-market data aggregator). Metabiota's own Form D for that 2015 round reports $30,199,999 sold to 24 investors, first sale 23 December 2014, signed by President and COO Robert Mann, with directors Riaz Valani, Nathan D. Wolfe and John DeLoche (Metabiota Form D, 2015) — the Form D does not name investors. Claims of a Burisma-linked "science project in Ukraine" trace to a Russian Ministry of Foreign Affairs statement of 27 March 2022 and to tabloid reporting, as catalogued by a third-party wiki (White Rose Intelligence — SECONDARY). No U.S. government contract, grant, or SEC filing documenting Metabiota work in Ukraine was located.
Part II: Register of Claims That Could Not Be Verified	Reported dollar figure(s) as transcribed	4. "EcoHealth Alliance received DTRA money that went to China." — Partially contradicted by the DoD Inspector General. DODIG-2024-099 records that DTRA self-identified 13 projects totaling $46.7 million awarded to EcoHealth Alliance, Inc. between 2014 and 2023 and reported that none of that funding was allocated to China (DODIG-2024-099). Note the arithmetic anomaly: the DoD IG's $46.7 million exceeds the $41.0 million in DTRA-coded prime awards visible to this audit in USAspending, indicating either awards not surfaced by recipient-name search or a broader DTRA definition of "project" (USAspending API; DODIG-2024-099).
Part II: Register of Claims That Could Not Be Verified	Reported dollar figure(s) as transcribed	5. "PREDICT cost $200 million." — Verified as a floor, not a precise figure. Science reported the program "received more than $200 million" over 2009–2020 (Science). The federally recorded PREDICT-2 obligation alone is $137,062,397 (USAspending); PREDICT-1 was announced with " incremental funding of up to $75 million over 5 years" (WCS newsroom). No consolidated PREDICT-1 obligation figure was retrievable from USAspending, whose USAID assistance coverage for FY2009–2013 is incomplete; searches on award ID GHN-A-OO-09-00010 returned no records (USAspending API).

Part / profile	Figure classification	Source text with inline citation
Part III: Cluster summary / introductory material	Reported dollar figure(s) as transcribed	Cluster summary. Between 1999 and 2026 the U.S. civilian disease-surveillance apparatus was rebuilt three times. The first rebuild (2002–2008) was statutory and bioterrorism-driven: the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Pub. L. 107-188) authorized CDC's BioSense alongside BioShield and BioWatch, and BioSense launched in 2003 pulling data first from Department of Defense and Department of Veterans Affairs treatment facilities (Gould, Walker, and Yoon, *Public Health Reports*, PMC5676506). The second rebuild (2006–2016) was institutional: PAHPA (Pub. L. 109-417) created BARDA and the Assistant Secretary for Preparedness and Response in December 2006 (CRS IF12683); the 9/11 Commission Act of 2007 put the National Biosurveillance Integration Center inside DHS at 6 U.S.C. §195b (Cornell LII); CDC stood up the Global Disease Detection program in 2004 and grew it to ten overseas regional centers by 2012 (Rao et al., *Emerging Infectious Diseases*, PMC5711302); and BioSense was rebuilt twice more, into BioSense 2.0 (Nov. 2011, hosted by ASTHO) and then into the ESSENCE-based National Syndromic Surveillance Program by end-2016 (PMC5676506). The third rebuild (2020–2026) was commercial: COVID-19 pushed CDC into direct procurement of population-scale molecular surveillance from private firms — Biobot Analytics and Verily Life Sciences for wastewater, Ginkgo Bioworks' Concentric unit and XpresTest/XpresCheck for airport traveler genomics — with the single largest identified civilian biosurveillance service contract in this cluster being Ginkgo's $74,725,666.61 CDC Traveler-Based Genomic Surveillance award 75D30125C20439 (USAspending API, 12 Aug. 2026). That commercial layer is now unwinding: Ginkgo announced on 26 Feb. 2026 that it is divesting its entire biosecurity business — the segment that runs the CDC airport program — to a consortium of investors, with 2025 biosecurity revenue of $37 million, down 30% from $53 million in 2024 (Ginkgo Q4/FY2025 results, PR Newswire). Simultaneously, the 2025 HHS restructuring folded roughly 1,000 ASPR personnel into CDC and cut ~2,400 CDC positions (HHS Fact Sheet), and the PAHPA authorities underpinning much of this architecture have been running on short extensions since Sept. 2023 (CRS IF12683). The through-line anomaly this cluster documents: the legal authorities for civilian biosurveillance are lapsing while the operational capability has been migrated to a small number of private contractors whose own corporate viability is now in question.
Part III: National Biosurveillance Integration Center (NBIC) — and its HHS interface	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. Lead: DHS (originally Office of Health Affairs; now CWMD Office) (GAO-24-106142). Identified DHS contract vehicles supporting NBIC/NBIS (USAspending API, 12 Aug. 2026): SAIC, HSHQDC06J00331, NBIS 2.0, $22,754,294.20 (2006–2011); Biospatial Inc., 70RWMD21P00000004, $4,117,500 (2021–2024) and 70RWMD19C00000007, $1,982,875; SCI Consulting, HSHQDC12J00005, $3,316,571.57; Accenture Federal Services, HSHQDC12J00392, $1,273,662.11; MITRE, HSHQDC13J00362`, $1,222,139.50**.
Part III: National Biosurveillance Integration Center (NBIC) — and its HHS interface	Reported dollar figure(s) as transcribed	4. Total government funding. GAO reported NBIC's budget at $10 million to $13 million annually for fiscal years 2012 through 2015 (GAO-15-793). No consolidated lifetime appropriation figure was located: UNVERIFIED — no primary source located for total NBIC funding 2007–2026.

Part / profile	Figure classification	Source text with inline citation
Part III: National Biosurveillance Integration Center (NBIC) — and its HHS interface	Reported dollar figure(s) as transcribed	9. Products / spinoffs. No corporate spinoff identified. Biospatial Inc. is the notable commercial beneficiary, holding two DHS awards totaling $6,100,375 across 2019–2024 (USAspending API, 12 Aug. 2026).
Part III: CDC BioSense Platform (BioSense 1.0 / 2.0), ESSENCE, and the National Syndromic Surveillance Program (NSSP)	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. CDC (National Center for Public Health Informatics → Division of Health Informatics and Surveillance) (GAO-09-100; PMC5676506). Identified award identifiers (USAspending API, 12 Aug. 2026): Sev1Tech, 7571TE26F00303, "National Syndromic Surveillance Program Cloud Hosting," $7,766,700.30, 21 Apr. 2026 – 20 Apr. 2027; International Society for Disease Surveillance (ISDS), CDC contract HHSD200201141831C, $449,844 (2011–2012); Johns Hopkins University Applied Physics Laboratory, EPA contract EPC06074 for ESSENCE, $1,262,464.25 (2006–2010); University of Pittsburgh, EPC06044, RODS demonstration, $49,033.46. CDC also awarded a three-year cooperative agreement in June 2016 to ISDS to run the NSSP Community of Practice (PMC5676506). CDC biosurveillance-coordination support contracts: CACI-NSS, HHSD2002013F55727, "Biosurveillance Coordination Activity," $5,026,367.27 (2013–2019); MPRI Inc., HHSD2002012F50070 $2,203,817.93, HHSD2002011F38273 $1,562,927.69, HHSD2002009F29065 $1,020,224.67, HHSD2002008F24498 $999,999.42 (USAspending API, 12 Aug. 2026).
Part III: CDC BioSense Platform (BioSense 1.0 / 2.0), ESSENCE, and the National Syndromic Surveillance Program (NSSP)	Reported dollar figure(s) as transcribed	4. Total government funding. No consolidated lifetime BioSense/NSSP appropriation figure was located in the sources opened this session: UNVERIFIED — no primary source located. The contract-level figures in field 3 are the verified floor. For FY2026 context, CDC's President's Budget requested $4.243 billion for CDC (CDC Budget Overview: FY 2026, stacks.cdc.gov record), with line items including Biothreat Radar: Advanced Molecular Detection $26 million and Biothreat Radar: Travel and Port Health Protection $26 million (FY 2026 CDC Budget Overview factsheet); CDC's FY2026 enacted core public health program level was $9.227 billion, down $21 million from FY2025 (CRS R47207).
Part III: CDC BioSense Platform (BioSense 1.0 / 2.0), ESSENCE, and the National Syndromic Surveillance Program (NSSP)	Reported dollar figure(s) as transcribed	11. Relationship to HHS/NIH/NIAID and DOD. DOD linkage is explicit and foundational: BioSense's initial 2003 data feeds were DoD and VA treatment records, and by 2008 the system ingested from 333 DoD and 770 VA facilities (PMC5676506). ESSENCE's development contract history includes JHU APL work for EPA (EPC06074) and DTRA funding to ISDS (HDTRA115C0004, $361,628) (USAspending API, 12 Aug. 2026) — a documented DTRA payment into the syndromic-surveillance professional society. NIH funded the methodological research base: NIH RePORTER records show R01PH000028, "Efficient, Scalable Multisource Surveillance Algorithms for BioSense," Carnegie Mellon University, PI Artur Dubrawski, $598,732 in each of FY2006 and FY2007 (NIH RePORTER API).

Part / profile	Figure classification	Source text with inline citation
Part III: CDC BioSense Platform (BioSense 1.0 / 2.0), ESSENCE, and the National Syndromic Surveillance Program (NSSP)	Reported dollar figure(s) as transcribed	12. Controversies / GAO findings. Congressional criticism in 2007 over false alerts and cost (PMC5676506). GAO-09-100 faulted CDC for the absence of reliable cost and timeline estimates and of outcome-based performance measures for the BioSense redesign, directing recommendations to the Director of the National Center for Public Health Informatics; CDC responded with an evaluation plan (Aug. 2012), timelines (Sept. 2012), and cost estimates (Jan. 2013) (GAO-09-100). The discontinuation of the BioSense web application at end-2016, after roughly $100M-scale multi-year investment, is a documented sunk-cost anomaly (PMC5676506) — note the dollar characterization here is the auditor's inference, not a sourced figure: UNVERIFIED — no primary source located for total BioSense 1.0 spend.
Part III: CDC Global Disease Detection (GDD) Program and Regional Centers	Reported dollar figure(s) as transcribed	4. Total government funding. UNVERIFIED — no primary source located for GDD program totals. Congressional-appropriations context that bounds it: CDC total global health funding was $692.8 million in the FY2023 omnibus, with the FY2024 House bill cutting it to $370.7 million (−47%) against a $765.0 million FY2024 request (KFF appropriations tracking table — secondary source, compiled from committee documents).
Part III: National Wastewater Surveillance System (NWSS)	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. CDC. Verified contract identifiers (USAspending API, 12 Aug. 2026): Biobot Analytics, 75D30122C13531, $31,077,006, 15 Apr. 2022 – 14 Sept. 2023; Biobot, 75P00121P00040 (HHS ASA), $1,940,400 (2021); Biobot NIH, 75N95023P00710, $799,971. Verily Life Sciences, 75D30124C18440, $42,317,282.38, 12 Jan. 2024 – 14 Sept. 2026; 75D30124C18357, $2,772,391.26; 75D30123C17984, $675,038.74. Goldbelt Professional Services, 75D30125C20677, $9,730,942.40, 22 Sept. 2025 – 21 Sept. 2027. GT Molecular, 75D30124C19209, $1,029,779. Regents of the University of California, 75D30122C14710, $1,104,069. Virginia Tech, 75D30122C14707, $584,968. National Academies of Sciences, Engineering, and Medicine, 75D30123F00017, $477,631.59. Oak Ridge Associated Universities, 75D30123F00001, $877,640.09. Soller Environmental, 75D30121P12105, $134,985.
Part III: National Wastewater Surveillance System (NWSS)	Reported dollar figure(s) as transcribed	4. Total government funding. Verified contract obligations/potential values identified above total approximately $93.5 million across ten vendors (USAspending API, 12 Aug. 2026); this is a floor, not the program total. CDC funding for NWSS has run on COVID supplemental appropriations through September 2025, and the Association of Public Health Laboratories has recommended a dedicated appropriation of $130 million per year (APHL, NWSS funding brief, March 2025). A total lifetime NWSS appropriation figure is UNVERIFIED — no primary source located.

Part / profile	Figure classification	Source text with inline citation
Part III: National Wastewater Surveillance System (NWSS)	Reported dollar figure(s) as transcribed	11. Relationship to HHS/NIH/NIAID and DOD. HHS/CDC program; Biobot also held NIH award 75N95023P00710, $799,971 (USAspending API, 12 Aug. 2026). NIH separately funded a large parallel academic wastewater portfolio under the RADx-rad initiative — e.g., U01DA053941 University of Miami, $2,676,864 (FY2021) with PIs Christopher E. Mason, Stephan C. Schurer, Helena Solo-Gabriele; U01DA053949 Columbia University, $2,448,262 (FY2021), PIs Kartik Chandran, Anne-Catrin Uhlemann; U01DA053893 Missouri Department of Health and Senior Services, $2,000,000 (FY2021), PI Jeff Wenzel; U01DA053903 University of Kentucky, $1,834,258 (FY2021), PI Scott M. Berry; U01DA053976 Arizona State University, $1,494,765 (FY2021), PIs Otakuye Conroy-Ben, Rolf U. Halden, Kerry Hamilton (NIH RePORTER API). No verified link found to DTRA, DARPA, JPEO-CBRND, CBEP, or BARDA.
Part III: National Wastewater Surveillance System (NWSS)	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. The funding cliff is the documented anomaly: NWSS has been sustained by COVID supplemental money through Sept. 2025 with no dedicated appropriation, prompting APHL's $130 million/year request (APHL, March 2025). No GAO or IG report specific to NWSS was located this session.
Part III: Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. CDC — specifically the Travelers' Health Branch, with the Division of Global Migration and Quarantine (DGMQ) originating the concept and the Advanced Molecular Detection (AMD) Program funding the pilot (CDC AMD success story). Contract identifiers (USAspending API, 12 Aug. 2026): Ginkgo Bioworks — 75D30125C20439, $74,725,666.61, 28 Feb. 2025 – 21 Mar. 2028; 75D30122C14933 "Airport Genomic Testing," $62,551,726.04, 16 Aug. 2022 – 21 Mar. 2025; 75D30124C19895, $1,205,149.24 (2024); 75D30126F00004, metagenomic next-generation sequencing, $3,199,875, 3 May 2026 – 14 Apr. 2028; Test Surge & Data Sharing task orders 75D30124F00001 $2,508,174.24, 75D30124F00002 $775,180, 75D30125F00003 $449,761.53. XpresTest, Inc. (XpresCheck/XWELL) — 75D30121C12036 "Airport COVID Surveillance," $5,534,322, 15 Sept. 2021 – 11 Aug. 2022; 75D30126C21193 "Ebola Entry Screening Services EO 14398," $18,137,975, 6 July 2026 – 5 Jan. 2027.
Part III: Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck	Reported dollar figure(s) as transcribed	4. Total government funding. Identified CDC obligations/potential values to Ginkgo for airport genomic surveillance total approximately $145.4 million across 75D30125C20439, 75D30122C14933, 75D30124C19895, 75D30126F00004, and the three Test Surge task orders; identified CDC awards to XpresTest total $23,672,297 (USAspending API, 12 Aug. 2026). XWELL announced a "new contract awarded August 12" valued at "approximately $16 million" to renew support for the program (XWELL, 17 Aug. 2023) — no contract number was stated in that release and it could not be matched to a specific award identifier this session: UNVERIFIED — no primary source located for that award's contract number. XWELL stated in March 2024 that additional funding "will double the CDC's current investment in the TGS program" without stating a dollar figure (XWELL, 12 Mar. 2024). Broader appropriation context: Congress included $1.75 billion for genomics through the American Rescue Plan in 2021 (CDC AMD success story).

Part / profile	Figure classification	Source text with inline citation
Part III: Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck	Reported dollar figure(s) as transcribed	10. Relationship to the Intelligence Community. No verified link found between the TGS program itself and CIA, ODNI, NIC, NCMI, or In-Q-Tel. Note separately that the prime contractor, Ginkgo Bioworks, holds an IARPA contract (N6600118C4504, FELIX program, $5,338,550) — an explicit IC relationship at the corporate level, not at the TGS-program level (USAspending API, 12 Aug. 2026).
Part III: Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck	Reported dollar figure(s) as transcribed	11. Relationship to HHS/NIH/NIAID and DOD. TGS is CDC/HHS. Prime contractor Ginkgo's other federal awards are heavily DOD/IC: DARPA HR001117C0092 (SD2) $10,446,304; DARPA ReVector HR001120C0073 $5,886,277; DARPA ICE HR001124C0378 $5,206,738; Army/DARPA SUPERB W911NF23C0002 $4,797,261; Navy DRINC BIO N6600123C4509 $1,826,095.16 and N6600112C4018 $3,159,148.73; Army SBIRs W31P4Q14C0035 $1.75M and W31P4Q13C0063 $150,000; HR001112C0010 $500,000; and NIH RADx-ATP 75N92020C00007` $6,574,473.60 (2020) (USAspending API, 12 Aug. 2026). No verified link found** between TGS and JPEO-CBRND, CBEP, DLA, or BARDA.
Part III: Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. Three documented anomalies. (a) Scope creep by contract vehicle: the program moved from SARS-CoV-2 to " more than 30 viral and bacterial targets" (Oct. 2023) and then to metagenomic next-generation sequencing under 75D30126F00004 in 2026 — i.e., untargeted sequencing of samples from international travelers, procured as an option under a COVID-era program (USAspending API, 12 Aug. 2026; XWELL, 12 Mar. 2024). (b) Permanence stated by the contractor, not by statute: Ginkgo's Matt McKnight described the expansion as "a further realization of the goal set out by the CDC and the Federal Government to incorporate the program as part of a permanent biosecurity effort in the United States" (XWELL, 12 Mar. 2024). (c) A new entry-screening mission for the same airport contractor: XpresTest's 75D30126C21193, $18,137,975, is titled "Ebola Entry Screening Services EO 14398" and runs 6 July 2026 – 5 Jan. 2027 (USAspending API, 12 Aug. 2026) — the executive order's text was not opened this session, so its contents are UNVERIFIED — no primary source located.
Part III: Ginkgo Bioworks Holdings, Inc. / Concentric by Ginkgo (contractor entity profile)	Reported dollar figure(s) as transcribed	3. Lead & funding agencies (as contractor). CDC (TGS, above); NIH (RADx-ATP 75N92020C00007, $6,574,473.60); DARPA (HR001117C0092, HR001120C0073, HR001124C0378); IARPA (N6600118C4504, FELIX, $5,338,550); U.S. Army (W911NF23C0002; SBIRs W31P4Q14C0035, W31P4Q13C0063); U.S. Navy (N6600123C4509, N6600112C4018) (USAspending API, 12 Aug. 2026).
Part III: Ginkgo Bioworks Holdings, Inc. / Concentric by Ginkgo (contractor entity profile)	Reported dollar figure(s) as transcribed	4. Total government funding. Identified federal awards across CDC, NIH, DARPA, IARPA, Army, and Navy total approximately $190 million in obligated/potential value (USAspending API, 12 Aug. 2026). Company-reported Biosecurity segment revenue: $78,975 thousand service + $28,949 thousand product in 2023; $53,071 thousand in 2024; $37,409 thousand in 2025 — a 30% decline in 2025 with a 23% biosecurity gross margin (Ginkgo Q4/FY2025 results).

Part / profile	Figure classification	Source text with inline citation
Part III: Ginkgo Bioworks Holdings, Inc. / Concentric by Ginkgo (contractor entity profile)	Reported dollar figure(s) as transcribed	10. Relationship to the Intelligence Community. Explicit and documented: Ginkgo holds IARPA contract N6600118C4504 under the FELIX program, $5,338,550 (USAspending API, 12 Aug. 2026). IARPA is a component of ODNI. No In-Q-Tel investment in Ginkgo was located this session: UNVERIFIED — no primary source located.
Part III: Ginkgo Bioworks Holdings, Inc. / Concentric by Ginkgo (contractor entity profile)	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. The core anomaly: a company whose biosecurity segment revenue fell from ~$108 million (2023, service + product) to $37.4 million (2025) and which is now divesting that segment entirely was awarded a $74.7 million, three-year CDC surveillance contract (75D30125C20439) beginning 28 Feb. 2025 — i.e., the federal government extended the program as the vendor exited the business (Ginkgo Q4/FY2025 results; USAspending API, 12 Aug. 2026). Also documented: $45.4 million of non-cash revenue recognized in 2024 from termination of Motif contracts and $7.5 million in 2025 from a terminated BiomEdit, Inc. contract; FY2025 GAAP net loss $(313) million after $(547) million in 2024 (Ginkgo Q4/FY2025 results).
Part III: BARDA — Biomedical Advanced Research and Development Authority	Reported dollar figure(s) as transcribed	4. Total government funding. No consolidated BARDA appropriation history was located in an opened primary source: UNVERIFIED — no primary source located for BARDA total appropriations 2007–2026. Verified partial figures: BARDA, together with JPEO-CBRND, made 290 COVID-19 awards totaling "nearly $48 billion" through the end of FY2021, working with more than 500 private-sector partners and procuring six products under the Project BioShield Special Reserve Fund in 2021 (HHS/medicalcountermeasures.gov, "BARDA15"). ASPR's FY2025 President's Budget request was $3.8 billion in discretionary funding (+$138 million above FY2023), plus a proposed $20 billion in mandatory funding across HHS public health agencies of which $10.5 billion would go to ASPR; the request included +$20 million for BARDA broad-spectrum antimicrobials/CARB, $95 million for medical countermeasure domestic production and supply-chain visibility ($75M onshoring + $20M supply chain), and +$12 million for critical infrastructure protection; ASPR reported $17 billion in industrial base investments during the pandemic (ASPR FY2025 President's Request Highlights).
Part III: BARDA — Biomedical Advanced Research and Development Authority	Reported dollar figure(s) as transcribed	11. Relationship to HHS/NIH/NIAID and DOD. BARDA is an HHS/ASPR component (CRS IF12683). Explicit DOD linkage: the joint BARDA–JPEO-CBRND COVID-19 award portfolio of 290 awards totaling nearly $48 billion (BARDA15). No verified link found to DTRA, DARPA, CBEP, DLA, or CTR in the sources opened this session.
Part III: BARDA DRIVe (Division of Research, Innovation, and Ventures) and BARDA Ventures	Reported dollar figure(s) as transcribed	4. Total government funding. For BARDA Ventures, BARDA committed to provide the Global Health Investment Corporation (GHIC) "a minimum of $50 million over five years, with potential for up to $500 million over 10 years," announced 1 June 2021 (GHIC announcement). A DRIVe division-level appropriation figure is UNVERIFIED — no primary source located.

Part / profile	Figure classification	Source text with inline citation
Part III: ASPR (Administration for Strategic Preparedness and Response) and PHEMCE	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. HHS. Statutory anchors include 42 U.S.C. §300hh-1 (Section 2802, National Health Security Strategy) and the medical-countermeasure sections 42 U.S.C. §§247d-6a, 247d-6b, 247d-6d, 247d-7e (Pub. L. 116-22). Related contract identified: Johns Hopkins University Applied Physics Laboratory, ASPR contract 75A50122C00052, RITCA disaster-response application, $49,215,931, 21 Sept. 2022 – 30 Sept. 2028 (USAspending API, 12 Aug. 2026).
Part III: ASPR (Administration for Strategic Preparedness and Response) and PHEMCE	Reported dollar figure(s) as transcribed	4. Total government funding. FY2025 President's Request: $3.8 billion discretionary for ASPR (+$138 million above FY2023), plus a proposed $20 billion mandatory across HHS public health agencies with $10.5 billion to ASPR (ASPR FY2025 President's Request Highlights).
Part III: ASPR (Administration for Strategic Preparedness and Response) and PHEMCE	Reported dollar figure(s) as transcribed	9. Products / spinoffs. None (government office). ASPR reported $17 billion in industrial base investments during the pandemic (ASPR FY2025 budget highlights).
Part III: ASPR (Administration for Strategic Preparedness and Response) and PHEMCE	Reported dollar figure(s) as transcribed	11. Relationship to HHS/NIH/NIAID and DOD. ASPR is the HHS operating division containing BARDA (CRS IF12683). The Defense Health Agency separately funded JHU APL biosurveillance work: HT001123F0082, biosurveillance subject-matter expertise, $1,292,042.81, and HT001123F0083, large-language-model biosurveillance, $1,275,194.70, both FY2023 (USAspending API, 12 Aug. 2026) — documented DOD investment in the same contractor that builds ASPR's response software.
Part III: NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR)	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. NIH / NIAID. CEIRS 2007 cycle (all starting 30 Mar. 2007, USAspending API, 12 Aug. 2026): St. Jude Children's Research Hospital HHSN266200700005C $86,755,630; Icahn School of Medicine at Mount Sinai HHSN266200700010C $42,125,108.92; Emory University HHSN266200700006C $40,085,272.14; University of Minnesota HHSN266200700007C $32,516,137.41; UCLA HHSN266200700009C $4,665,399.79. CEIRS 2014 cycle (all starting 9 Jan. 2014): St. Jude HHSN272201400006C $132,603,698; Mount Sinai HHSN272201400008C $79,763,886.26; Emory HHSN272201400004C $38,421,073.52; University of Rochester HHSN272201400005C $37,266,757.07; Johns Hopkins University HHSN272201400007C $27,856,129.01. CEIRR 2021 cycle (starting 1 Apr. 2021 except as noted): St. Jude 75N93021C00016 $105,666,007.16 (to 28 Feb. 2029); Mount Sinai 75N93021C00014 $74,543,182.31; University of Pennsylvania 75N93021C00015 $59,036,767.53; Johns Hopkins 75N93021C00045 $27,242,786.07 (1 Aug. 2021 – 2 Aug. 2028); University of Georgia Research Foundation 75N93021C00018 $24,554,514.81; Emory University 75N93021C00017 (NIAID-announced base amount $1,000,671); Digital Infuzion LLC 75N93021C00007 $18,812,223 (data coordination) (USAspending API, 12 Aug. 2026; NIAID, 14 Apr. 2021).

Part / profile	Figure classification	Source text with inline citation
Part III: NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR)	Reported dollar figure(s) as transcribed	4. Total government funding. NIAID stated that first-year CEIRR funding would total approximately $24 million, with announced base awards of $6,001,311 (Mount Sinai), $6,984,256 (Penn), $8,992,234 (St. Jude), $1,000,671 (Emory), and $1,000,000 (University of Georgia Research Foundation) (NIAID, 14 Apr. 2021). Cumulative federal obligations/potential values recorded in USAspending across the three cycles total approximately $832 million (2007 cycle ≈ $206.1M; 2014 cycle ≈ $315.9M; 2021 cycle ≈ $309.9M including Digital Infuzion) (USAspending API, 12 Aug. 2026). Annual NIH RePORTER project-year records corroborate the scale — e.g., 272201400006C, St. Jude, $14,523,702 in FY2015 and 75N93021C00016, St. Jude, $14,392,212 in FY2023 (NIH RePORTER API).
Part III: NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR)	Reported dollar figure(s) as transcribed	5. Technology. Domestic and international animal- and human-influenza surveillance networks; rapid strain identification methods; pathogenesis and host-response studies; a dedicated Data Processing and Coordinating Center (DPCC) providing the data-sharing and tracking platform (CEIRR Network archive). Under CEIRR, data coordination is contracted to Digital Infuzion LLC (75N93021C00007, $18,812,223) (USAspending API, 12 Aug. 2026).
Part III: NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR)	Reported dollar figure(s) as transcribed	9. Products / spinoffs. Digital Infuzion LLC is the commercial data-coordination beneficiary (75N93021C00007, $18,812,223) (USAspending API, 12 Aug. 2026). No other spinoff identified.
Part III: NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR)	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. Two documented anomalies. (a) Extreme award concentration: across all three cycles, St. Jude Children's Research Hospital and Mount Sinai account for roughly $521 million of the ~$832 million identified, i.e. about 63% of the program (USAspending API, 12 Aug. 2026). (b) A large gap between announced and actual funding: NIAID publicly announced Emory's CEIRR contract 75N93021C00017 at $1,000,671 and UGA's at $1,000,000 (NIAID, 14 Apr. 2021), while USAspending records UGA's 75N93021C00018 at $24,554,514.81 (USAspending API, 12 Aug. 2026) — the announced figures are first-year base amounts, not total contract value, a distinction NIAID's press release does not make explicit. No GAO or IG report specific to CEIRS/CEIRR was located this session.

Part / profile	Figure classification	Source text with inline citation
Part III: NIH RePORTER-documented biosurveillance grants to universities (portfolio)	Reported dollar figure(s) as transcribed	4. Total government funding. Largest identified single-year awards, verbatim from RePORTER: 1ZIHLM200888-16, "National Biomedical Information Services," National Library of Medicine, FY2024, $366,260,951, PI Michael Huerta — an NLM intramural line item that dominates any biosurveillance-adjacent dollar ranking; 3U24MD016258-01S1, "RADx-UP CDCC SAY YES COVID Test Study," Duke University, FY2021, $7,653,833, PIs Michael Cohen-Wolkowiez, Giselle Corbie, Warren Alden Kibbe; 1U01IP001238-01, "IP24-045, PREVENT: Preparedness through Respiratory Virus Epidemiology and Community Engagement," University of California San Diego, FY2024, $5,753,431, PI Louise Chang Laurent (1 Aug. 2024 – 31 July 2029); 1UC7AI180309-01, " UofL RBL Operations, Workforce Development and Pandemic Preparedness Research," University of Louisville, FY2023, $2,935,664, PI Kenneth E. Palmer (NIH RePORTER API).
Part III: NIH RePORTER-documented biosurveillance grants to universities (portfolio)	Reported dollar figure(s) as transcribed	5. Technology. SNOMED-CT-based natural language processing (R01PH000022, Mayo Clinic Rochester then Mount Sinai, PI Peter L. Elkin, $514,616 FY2005 / $834,535 FY2006 / $677,278 FY2007); computational testbeds for biosurveillance methods (R01PH000027, Stanford University, PI Mark A. Musen, $675,019 in FY2006 and FY2007); multisource surveillance algorithms for BioSense (R01PH000028, Carnegie Mellon, PI Artur Dubrawski, $598,732 in FY2006 and FY2007); NLP ontologies for syndromic surveillance from ED reports (R01LM009427, University of Pittsburgh, PI Wendy W. Chapman, $387,074 FY2007 / $392,337 FY2008); computer-vision tick classification (R44AI162425, VecTech, LLC, PI Autumn Goodwin, $950,392 FY2023 / $942,842 FY2024 / $970,682 FY2025); microfluidic-free droplet technology for airborne pathogen monitoring (1R21AI196878-01, UCSF, PI Daniel Weisgerber, $451,000, 1 Apr. 2026 – 31 Mar. 2028) (NIH RePORTER API).
Part III: NIH RePORTER-documented biosurveillance grants to universities (portfolio)	Reported dollar figure(s) as transcribed	6. Entities involved. Universities and institutions with documented biosurveillance-related NIH awards include Kaiser Foundation Research Institute (RC2LM010797, "The Kaiser Permanente National Research Database," $1,740,459 FY2009 and $1,622,312 FY2010, PIs Joseph Terdiman then Andrew L. Avins), Mayo Clinic Rochester, Icahn School of Medicine at Mount Sinai, Stanford, Carnegie Mellon, University of Pittsburgh, Indiana University Indianapolis (R18HS020014, PI Marc B. Rosenman), Duke, UC San Diego, Columbia, University of Miami, Arizona State, University of Kentucky, University of Louisville, Missouri Department of Health and Senior Services, Rice University, UCSF, and the company VecTech, LLC (NIH RePORTER API).
Part III: NIH RePORTER-documented biosurveillance grants to universities (portfolio)	Reported dollar figure(s) as transcribed	9. Products / spinoffs. VecTech, LLC (automated arthropod identification) is the identified commercial recipient in the biosurveillance text-search results, holding SBIR Phase II awards totaling $2,863,916 across FY2023–FY2025 (NIH RePORTER API).

Part / profile	Figure classification	Source text with inline citation
Part III: NIH RePORTER-documented biosurveillance grants to universities (portfolio)	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. Two data anomalies worth flagging for follow-up. (a) A text search for "biosurveillance" surfaces awards with no evident surveillance content — e.g., R01DA029910, "Prison Interventions and HIV Prevention Collaboration," Yale University, PI Frederick Lewis Altice, at $653,796–$677,026 per year across FY2015–FY2019 — indicating that "biosurveillance" appears in the project terms/abstract of grants whose stated purpose is unrelated; any dollar rollup by keyword will therefore overstate the portfolio (NIH RePORTER API). (b) The $366,260,951 NLM intramural "National Biomedical Information Services" project (1ZIHLM200888-16, FY2024) dominates keyword-based wastewater/biosurveillance searches without being a surveillance program, a classification artifact that would distort any automated analysis (NIH RePORTER API).
Part III: Cross-cutting findings and open leads	Reported dollar figure(s) as transcribed	- The single largest documented civilian biosurveillance service contract in this cluster is Ginkgo's 75D30125C20439 at $74,725,666.61 (28 Feb. 2025 – 21 Mar. 2028) — awarded roughly a year before Ginkgo announced it was exiting the biosecurity business entirely (USAspending API, 12 Aug. 2026; Ginkgo Q4/FY2025 results). Open lead: the identity of the "consortium of investors" acquiring the biosecurity business, and whether CDC contract novation follows.
Part III: Cross-cutting findings and open leads	Reported dollar figure(s) as transcribed	- Airport surveillance is being converted from pathogen-specific to untargeted. CDC task order 75D30126F00004 procures metagenomic next-generation sequencing (3 May 2026 – 14 Apr. 2028, $3,199,875) under the same program that began as SARS-CoV-2 variant detection in Sept. 2021 (USAspending API, 12 Aug. 2026; CDC AMD success story).
Part III: Cross-cutting findings and open leads	Reported dollar figure(s) as transcribed	- A new entry-screening authority appears in the contract record ahead of the public record. XpresTest's 75D30126C21193, "Ebola Entry Screening Services EO 14398," $18,137,975, 6 July 2026 – 5 Jan. 2027 (USAspending API, 12 Aug. 2026). Open lead: retrieve the text of Executive Order 14398 from the Federal Register — not fetched this session.

Part / profile	Figure classification	Source text with inline citation
Part IV: Cluster Summary	Reported dollar figure(s) as transcribed	This cluster covers the federal machinery that turned disease reporting into an intelligence function. Four institutional threads converge. First, the event-based open-source thread: Project Argus at Georgetown University, activated in late 2004 with money from the CIA-affiliated Intelligence Technology Innovation Center (ITIC) and DHS, patented by Georgetown under ITIC contract number 2006-1016 426-000, and consumed as a data feed by the DHS National Biosurveillance Integration System/Center (NBIS/NBIC) whose 2005 "NBIS Lite" prototype — a ~$123,000 SAIC contract — was expressly designed to ingest "ARGUS, an information gathering tool sponsored by Georgetown University" (DHS OIG-07-61). Second, the environmental-detection thread: BioWatch, stood up in 2003, which produced 149 BioWatch Actionable Results between 2003 and 2014 and not one confirmed attack (GAO-16-99), saw its Generation 3 upgrade cancelled in 2014, its BD21 replacement paused, and — in the FY2026 restructuring — was moved out of the dissolved CWMD Office (DHS CWMD FY2026 CBJ) and on to CISA and then FEMA (FEMA Advisory, 11 June 2026). Third, the formal IC thread: AFMIC → NCMI at Fort Detrick, redesignated in a July 2008 ceremony attended by DIA Director LTG Michael Maples, USD(I) James Clapper and DHS Under Secretary for Intelligence Charles Allen (DIA press release, 2 July 2008); and the NIC's pandemic estimative line running from NIE 99-17D (January 2000), drafted in part by an AFMIC officer (NIE 99-17D), through the December 2008 ICA on global health (ODNI). Fourth, the DARPA thread: the Biological Technologies Office (est. April 2014) programs PREEMPT, PREPARE, P3 and Insect Allies — and the rejected 2018 DEFUSE proposal from EcoHealth Alliance, which DARPA's own review faulted for lacking a gain-of-function risk assessment and DURC mitigation plan (House COVID Select final report).
Part IV: Cluster Summary	Reported dollar figure(s) as transcribed	The most consequential anomaly in this cluster is structural, not scientific: the U.S. built its earliest global disease-warning capability inside an intelligence funding channel (ITIC, later the Open Source Center) at a university (Georgetown), then commercialized the same methodology through private firms (Veratect, Ascel Bio, Proseko) staffed by the same principal investigator, while the statutory civil biosurveillance integrator (NBIC) remained chronically under-resourced — $10M–$13M per year, with only 3 of 19 partner agencies detailing liaisons (GAO-15-793).
Part IV: Project Argus (Georgetown University)	Reported dollar figure(s) as transcribed	4. Total government funding — UNVERIFIED — no primary source located for a consolidated Argus program total. The only dollar-denominated Argus-adjacent figure located is the DHS NBIS Lite prototype contract of approximately $123,000 (Aug. 2005), which was built to ingest Argus data (DHS OIG-07-61).

Part / profile	Figure classification	Source text with inline citation
Part IV: National Biosurveillance Integration System / Center (NBIS / NBIC)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies (award IDs) — DHS; originally the Office of Health Affairs, then CWMD, now Office of Health Security. Statute places NBIC under the Assistant Secretary for Countering Weapons of Mass Destruction, and directs that the NBIC Directing Officer act "in consultation with the Director of National Intelligence" (6 U.S.C. §195b). NBIS Lite prototype: ~$123,000, contractor Science Applications International Corporation (SAIC) (OIG-07-61). A live NBIC procurement vehicle, RFI 70RWMD24RFI00000001, "Biosurveillance Data Source Acquisition," sought subscription-based global/nationwide datasets integrable into NBIC systems (HigherGov listing) [SECONDARY aggregator of a federal notice].
Part IV: National Biosurveillance Integration System / Center (NBIS / NBIC)	Reported dollar figure(s) as transcribed	4. Total government funding — No lifetime total published. Documented annual points: OHA funding requested to rise from $5M (FY2007) to $118M (FY2008) (OIG-07-61); NBIC received $8M in FY2010 and requested $7M for FY2011 (Garza testimony); $10M–$13M per year as of 2015 (GAO-15-793); "reduced overall funding for NBIC in fiscal year 2019" (GAO-24-106142).
Part IV: BioWatch	Reported dollar figure(s) as transcribed	3. Lead and funding agencies (award IDs) — DHS. Originally Office of Health Affairs (Garza testimony), then CWMD, then — per the FY2026 request — CISA's Infrastructure Security Division (DHS CWMD FY2026 CBJ), with CRS confirming the FY2026 CISA O&S request includes $238 million for BioWatch, Securing the Cities, and Training, Exercise, and Readiness programs previously funded through CWMD (CRS R48704); FEMA then absorbed the program (FEMA Advisory). Grant vehicle: Assistance Listing 97.091, FY2026 BioWatch Grant Program, $35,000,000 program funding, 40 expected awards, $100,000 minimum / $6,000,000 maximum, administered by DHS–FEMA, closed 30 July 2026 (Grants.gov opportunity listing).
Part IV: BioWatch	Reported dollar figure(s) as transcribed	4. Total government funding — No official lifetime total located. Program costs exceeded $1.1 billion by 2014, and DHS had told vendors Gen-3 would be worth $3.1 billion over its first five years (Los Angeles Times, 26 Apr. 2014) [SECONDARY].
Part IV: BioWatch	Reported dollar figure(s) as transcribed	6. Entities involved — Northrop Grumman received an $8.4 million task order under the BioWatch Gen-3 System Performance Demonstration Contract with total potential value of $37 million over three years; its team comprised Luminex (Austin, Tex.), Research International (Monroe, Wash.) and Global FIA (Fox Island, Wash.), building on Northrop's USPS Biohazard Detection System work (Northrop Grumman) [SECONDARY]. Federal roles: EPA sampling support, CDC laboratory coordination, FBI law-enforcement lead (CRS RL32152). Los Alamos National Laboratory was tasked in 2021 with a new optimization assessment (HSToday) [SECONDARY].
Part IV: DARPA PREEMPT (Preventing Emerging Pathogenic Threats)	Reported dollar figure(s) as transcribed	4. Total government funding — No program total published. Largest documented single award: up to $9.37 million over 3½ years to the UC Davis-led team (UC Davis).
Part IV: DARPA Pandemic Prevention Platform (P3)	Reported dollar figure(s) as transcribed	4. Total government funding — No program total published. Largest documented single award: up to US$30 million over four years to AbCellera (AbCellera) [SECONDARY — company press release, but the issuing party to the award].

Part / profile	Figure classification	Source text with inline citation
Part IV: DARPA Insect Allies	Reported dollar figure(s) as transcribed	4. Total government funding — Reported as $45 million over four years (Vice) [SECONDARY — not confirmed by any DARPA document fetched here; treat as unconfirmed]. Confirmed component awards: $10.3 million over four years to the Boyce Thompson Institute-led VIPER team (EurekAlert/BTI) and up to $7 million over four years to Penn State (Penn State).
Part IV: DEFUSE (rejected 2018 proposal to DARPA)	Reported dollar figure(s) as transcribed	4. Total government funding — Zero U.S. government dollars were awarded under DEFUSE. The requested amount was $8,411,546 (Phase I) + $5,797,699 (Phase II) = $14,209,245 (DRASTIC-hosted rejection analysis) [SECONDARY].
Part IV: In-Q-Tel (IQT) — CIA Strategic Investment Arm	Reported dollar figure(s) as transcribed	6. Entities involved — Metabiota (with Munich Re as co-signatory of strategic agreements, 22 Aug. 2017) (IQT); T2 Biosystems, whose IQT investment was part of a $10.8 million Series B alongside Flagship Ventures, Polaris Venture Partners, Flybridge Capital Partners and Partners Healthcare (BioSpace) [SECONDARY]; Claremont BioSolutions (IQT).
Part IV: In-Q-Tel (IQT) — CIA Strategic Investment Arm	Reported dollar figure(s) as transcribed	8. Institutional lineage — Predecessor entity to Metabiota's methodology is Nathan Wolfe's Global Viral Forecasting Initiative, founded 2007, which received an $11 million funding package to implement a pandemic early-warning system (Newswise/GVFI release) [SECONDARY] and was supported by grants from Google.org and the Skoll Foundation (TED blog) [SECONDARY].
Part IV: In-Q-Tel (IQT) — CIA Strategic Investment Arm	Reported dollar figure(s) as transcribed	10. Relationship to the IC — Definitional: IQT exists to serve the IC (IQT/Claremont release). Important qualification: the 2017 IQT release states IQT and Munich Re "signed strategic agreements with Metabiota"; it does not state an equity amount or an equity stake, and no equity figure was located in any primary document fetched here — the frequently repeated claim that "the CIA bought a stake in Metabiota" for a specified sum is UNVERIFIED — no primary source located. Metabiota's disclosed venture history — a $30 million Series A (May 2015) led by RSTP, $32.8 million total raised, with Capricorn Healthcare, WP Global Partners, Industry Ventures and Data Collective — does not list In-Q-Tel as an equity investor (TechCrunch) [SECONDARY].
Part IV: Explicit Negative Findings (claims checked and not substantiated in this session)	Reported dollar figure(s) as transcribed	- Insect Allies $45 million total program value — reported only in secondary press; not confirmed by any DARPA document fetched here.

Part / profile	Figure classification	Source text with inline citation
Part V: Cluster Summary	Reported dollar figure(s) as transcribed	This cluster traces the commercial layer of US-linked disease surveillance: the software platforms, data brokers, and for-profit spinoffs that converted government epidemic-intelligence requirements into contracts, equity, and acquisitions. The documented pattern across nine entities is consistent. Academic or nonprofit " open-source epidemic intelligence" projects were built with federal grant money (HealthMap on NIH/NLM grants R21LM009263 and R01LM007970 plus a Google.org grant, per PLoS Medicine), then spun into companies that were absorbed by federal primes — HealthMap's commercial arm Epidemico was bought by Booz Allen Hamilton in October 2014 for an undisclosed sum (Booz Allen investor relations); Veratect, the commercial vehicle carrying Georgetown Project Argus's chief scientist, was acquired 3 May 2010 by geospatial-intelligence contractor SPADAC (PitchBook), which GeoEye then bought for $46 million on 4 December 2010 and renamed GeoEye Analytics (GeoEye Form 8-K, SEC EDGAR).
Part V: Cluster Summary	Reported dollar figure(s) as transcribed	The dollar concentration is in two firms. Ginkgo Bioworks/Concentric holds CDC traveler genomic surveillance contracts obligating $74,725,666.61 (contract 75D30125C20439) and $62,551,726.04 (contract 75D30122C14933) plus DARPA, IARPA-linked Navy, and NIH awards, and was approved for a US International Development Finance Corporation loan of up to $1.1 billion (DFC). Palantir Technologies built HHS Protect under two sole-source awards totaling $24,861,816 in April 2020 and consolidated four pandemic-era systems under a five-year, $443 million CDC "Common Operating Picture" contract announced December 2022 (FedScoop). GAO found in September 2024 that CDC's DCIPHER and HHS Protect were duplicative, that FY2023 costs were $84,368,079.00 for Tiberius, $28,891,986.28 for HHS Protect, and $24,049,638.81 for DCIPHER, and that a planned consolidation had not begun and had produced no identified cost savings (GAO-24-106638).
Part V: 1. HealthMap (Boston Children's Hospital / Harvard Medical School)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies with identifiers — NIH National Library of Medicine grants R21LM009263-01 and R01LM007970-01, plus the Canadian Institutes of Health Research and a Google.org research grant, are the funding acknowledgments in the founding methods paper (PLoS Medicine, 2008). PubMed indexes grants R21 LM009263, R01 LM007677, and N01-LM-3-3515 for the same publication (PubMed 18096908). NIH grant G08LM009776 to the Children's Hospital Corporation, titled " HEALTHMAP: KNOWLEDGE MANAGEMENT FOR EMERGING INFECTIOUS DISEASE INTELLIGENCE," totaled $592,134 with a period of performance 30 September 2009 – 29 September 2013 (USAspending.gov). Brownstein's March 2020 House Science Committee disclosure lists, among others: CDC 2007-2017-95101 MedFinder, $717,182 and $2,025,020 (08/01/17–07/31/22); NIH/NLM 5R01LM011965-03, $1,154,011 (05/01/15–04/30/19); NIH/NLM 1R01LM010812-06, $2,488,948 (07/15/10–07/14/17); CDC 5U38OT000172-02 influenza medication finder, $430,000 (11/1/14–06/30/17); CDC 5U38OT000143-05 Flu Near You pilot, $30,000; USAID AID-OAA-F-16-00115, $140,651; and IARPA " SIGINT-based Anticipation of Future Events (SAFE) – Mercury Program" subcontract 2016-16041100002, $225,000, 05/01/16–10/31/17 (Brownstein disclosure, congress.gov).

Part / profile	Figure classification	Source text with inline citation
Part V: 1. HealthMap (Boston Children's Hospital / Harvard Medical School)	Reported dollar figure(s) as transcribed	4. Total government funding — No single consolidated total is published. Documented federal awards identified in this audit exceed $8.3 million across the NIH, CDC, USAID, and IARPA lines enumerated above (Brownstein disclosure; USAspending.gov). A reported Google.org grant of $3 million in October 2008 appears only in a non-primary encyclopedia entry (de.wikipedia.org) — UNVERIFIED — no primary source located for the dollar figure. The Harvard Gazette confirms a Google.org grant and CDC funding without amounts (Harvard Gazette).
Part V: 1. HealthMap (Boston Children's Hospital / Harvard Medical School)	Reported dollar figure(s) as transcribed	9. Products, companies, spinoffs — Epidemico, Inc. was the commercial spinout; Booz Allen Hamilton acquired it, announced 29 October 2014, and stated that "one of Epidemico's commercially licensed products, HealthMap, leads the field in digital disease detection tracking over 200 infectious diseases worldwide in 15 different languages" (Booz Allen). Price was undisclosed (HealthExec, secondary). Epidemico's own federal contracts, from USAspending.gov: FDA HHSF223201310211C, $1,719,206 (2013–2016); FDA HHSF223201210217C, $800,612 (social-media adverse-event surveillance); FDA HHSF223201400184C, $757,288.80 (tobacco online monitoring); DHS HSHQDC15C00071, $721,721.39 (National Biosurveillance Integration Center real-time data feed, 2015–2020); FDA HHSF223201210016C, $704,974.95; DHS HSHQDC13C00125, $480,000; CDC HHSD2002016M91892P, $45,000 (USAspending.gov).
Part V: 1. HealthMap (Boston Children's Hospital / Harvard Medical School)	Reported dollar figure(s) as transcribed	10. Intelligence Community relationship — Documented: an IARPA Mercury/SAFE program subcontract of $225,000 (2016–2017) to Brownstein's group (congress.gov disclosure). Brownstein's institutional biography lists advisory roles to HHS, DHS, CDC, the Institute of Medicine, WHO, and the White House (Boston Children's). No In-Q-Tel investment or CIA contract for HealthMap was located in any source opened in this session — no verified link found.
Part V: 2. ProMED-mail (International Society for Infectious Diseases)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies — ProMED is a nonprofit program, not a federal program of record. A CDC-hosted document states ProMED was established "with the support and encouragement of the Federation of American Scientists and SatelLife," with servers and software from Oracle and mail service at the Harvard School of Public Health (CDC Stacks). Named funders include the Wellcome Trust, the Skoll Global Threats Fund, CRDF Global, the World Organisation for Animal Health (OIE), and individual donors, with in-kind support from HealthMap (International Health, Oxford). A Google.org "Predict and Prevent" grant in October 2008 is reported in a secondary encyclopedia entry (Wikipedia) — treat as secondary. Federal award of record: USAID grant AIDOAAF1600115 to the International Society for Infectious Diseases, $514,141, 3 October 2016 – 27 June 2019, "MAPPING THE RISK OF INTERNATIONAL INFECTIOUS DISEASE SPREAD" (USAspending.gov).

Part / profile	Figure classification	Source text with inline citation
Part V: 2. ProMED-mail (International Society for Infectious Diseases)	Reported dollar figure(s) as transcribed	4. Total government funding — The only US federal award to ISID located in USAspending.gov is the $514,141 USAID grant above (USAspending.gov). ISID's IRS Form 990 data for FY2023 shows contributions of $2,060,988 (61.8% of revenue), program services of $457,824, royalties of $489,723, total assets of $2,986,201, and total liabilities of $756,580; for FY2022 contributions were $656,607 and program services $1,722,381 (EIN 22-2473000) (ProPublica Nonprofit Explorer). ProMED's operating cost has been reported at roughly $1 million per year (Science, secondary).
Part V: 3. BlueDot (Canada)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies with identifiers — Canadian, not US. Seed funding of CAD $400,000 from MaRS Innovation and CAD $140,000 from Ontario Centres of Excellence, followed by a Series A from Hong Kong-based Horizons Ventures announced 2 December 2014 (TIAP). A 2019 round is reported at $9.4 million (Wikipedia, secondary) and CAD $9.2 million (BetaKit, secondary) from The Co-operators and the BDC Capital Women in Technology Venture Fund — report as a range. On 11 January 2023 the Government of Canada invested $3 million through FedDev Ontario (BlueDot). Canadian Food Inspection Agency contract to BLUEDOT INC., non-competitive on "Exclusive Rights" grounds with one bid, original value CAD $164,188.90 (13 February 2024 – 28 February 2025), amended to CAD $246,283.35 through 28 February 2026 (Government of Canada open contracts).
Part V: 3. BlueDot (Canada)	Reported dollar figure(s) as transcribed	4. Total government funding — Canadian public funding documented here totals CAD $3,246,283.35 plus the undisclosed-value Public Health Agency of Canada contract announced by Prime Minister Justin Trudeau on 23 March 2020 (BetaKit, secondary; BlueDot). US federal funding: zero. A recipient search for "BlueDot" on USAspending.gov returned no awards (USAspending.gov).
Part V: 3. BlueDot (Canada)	Reported dollar figure(s) as transcribed	12. Controversies — The CFIA award was let non-competitively under an "Exclusive Rights" justification with a single bid and was subsequently amended upward by CAD $82,094.45, a 50% increase over the original value (Government of Canada open contracts).
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| 75D30125C20439 | CDC — Traveler-Based Genomic Surveillance Program | $74,725,666.61 | $85,741,215.56 | signed 2025-01-17; PoP 2025-02-28 → 2028-03-21; solicitation 75D301-25-R-73237; 3 offers; NAICS 541380 |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| 75D30122C14933 | CDC — Airport Genomic Testing | $62,551,726.04 | $76,575,638.04 | signed 2022-08-16; solicitation 75D301-22-R-72357; 1 offer received |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| HR001117C0092 | DARPA — Synergistic Discovery and Design (SD2) | $10,446,304 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| 75N92020C00007 | NIH — RADx-ATP | $6,574,473.60 | — | — |

Part / profile	Figure classification	Source text with inline citation
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| HR001120C0073 | DARPA — ReVector | $5,886,277 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| N6600118C4504 | Navy / IARPA — FELIX | $5,338,550 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| HR001124C0378 | DARPA — ICE | $5,206,738 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| W911NF23C0002 | Army / DARPA — SUPERB | $4,797,261 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| 75D30126F00004 | CDC — metagenomic next-generation sequencing | $3,199,875 | — | 2026-05-03 → 2028-04-14 |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| 75D30124F00001 / F00002 / 75D30125F00003 | CDC — test surge IDIQ orders | $2,508,174.24 / $775,180 / $449,761.53 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| N6600123C4509 | Navy | $1,826,095.16 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	| 75D30124C19895 | CDC | $1,205,149.24 | — | — |
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	Non-contract federal financing: the US International Development Finance Corporation approved a loan of up to $1.1 billion for Ginkgo to expand "its commercial biosecurity business at a global scale," stating the loan "will aid in America's response and recovery to the COVID-19 pandemic by facilitating the mass production of key raw materials for vaccines and the deployment of significant testing capacity" (DFC).

Part / profile	Figure classification	Source text with inline citation
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	4. Total government funding — Contract obligations identified above total approximately $185.5 million, with a combined ceiling of at least $212 million on the two CDC traveler contracts alone (USAspending.gov). Ceiling positions add substantially more potential value: a position on the DoD Joint Enterprise Research, Development, Acquisition and Production/Procurement (JERTA) IDIQ "worth up to $8.3 billion," on which Ginkgo is described as "the only synthetic biology firm," plus support to Battelle on a "potential four-year, $43.5 million task order" under the Homeland Defense and Security Technical Area Task contract from DoD's Information Analysis Center (ExecutiveBiz, secondary). IARPA contracts "totaling up to $64 million" were reported at the 2018 launch of the biosecurity initiative (Chemical & Engineering News, secondary). Reported company revenue: full-year 2024 Biosecurity revenue $53 million (service revenue $53,071 thousand), down 51% from $108 million in 2023 ($78,975 thousand service plus $28,949 thousand product); total revenue $227,043 thousand in 2024 versus $251,455 thousand in 2023 (Ginkgo Q4/FY2024 results). Ginkgo's 10-K states plainly: "Because biosecurity is a matter of national and global security, our primary biosecurity customers are governments" (Ginkgo 10-K excerpt).
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	8. Institutional lineage — Ginkgo absorbed the Metabiota epidemiological data lineage in 2022 via Baktus, Inc., a Delaware public benefit corporation, and Metabiota's outgoing CEO Nita Madhav joined Ginkgo as part of the transaction (PR Newswire). Metabiota's own prior federal record, from USAspending.gov: DTRA HDTRA114C0104, $18,417,699.34 (2014–2016); DTRA HDTRA112C0024, $3,155,466.35; DHS HSHQDC13CB0048, $349,512.84; Army W81XWH11P0752, $149,832.35; DHS HSHQDC10P00100, $90,000 (USAspending.gov). The traveler program itself is a direct descendant of CDC's pandemic-era border surveillance requirement (CDC EID).
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	9. Products, companies, spinoffs, IPO/SPAC — Ginkgo went public by SPAC merger with Soaring Eagle Acquisition Corp (NASDAQ: SRNG) at a $15 billion valuation, closing 17 September 2021 with $1.63 billion in proceeds (Pomerantz LLP). Asset acquisition: epidemiological data infrastructure from Baktus/Metabiota, announced 19 August 2022, with no purchase price disclosed on the announcement (PR Newswire). Commercial partnership: XpresCheck award of approximately $16 million with "overall potential to exceed $61 million based on CDC program options" (PR Newswire).

Part / profile	Figure classification	Source text with inline citation
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	10. Intelligence Community relationship — Documented. Navy-administered IARPA FELIX contract N6600118C4504, $5,338,550 (USAspending.gov); IARPA Fun GCAT and FELIX software delivery, with Ginkgo partnering with Northrop Grumman and retaining Andrew Weber, former Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, as an adviser on the FELIX prime contract (ExecutiveBiz, secondary). Ginkgo is described as an In-Q-Tel portfolio company in In-Q-Tel's own podcast material featuring founder Jason Kelly with B.Next's Dr. Kevin O'Connell (In-Q-Tel podcast listing) — the investment amount and date were not located in a primary filing this session and are UNVERIFIED — no primary source located. Additionally, CDC CFA director Dylan George served as a vice president at In-Q-Tel before joining Ginkgo (CDC).
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	11. HHS / DOD / DARPA / BARDA relationships — HHS/CDC: the traveler contracts and mNGS orders above (USAspending.gov). NIH: RADx-ATP contract 75N92020C00007, $6,574,473.60 (USAspending.gov). DARPA: SD2, ReVector, ICE, and SUPERB contracts above (USAspending.gov). DoD: JERTA IDIQ position and HD TAT support (ExecutiveBiz, secondary). ASPR: then-Assistant Secretary for Preparedness and Response Robert Kadlec, M.D. was quoted in the DFC loan announcement supporting the expansion (DFC).
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	- Sole-source exposure: CDC contract 75D30122C14933, worth $62,551,726.04 obligated, drew only one offer (USAspending.gov).
Part V: 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity)	Reported dollar figure(s) as transcribed	- Securities litigation: Bernstein v. Ginkgo Bioworks Holdings Inc. et al., No. 4:21-cv-08943 (N.D. Cal.), filed November 2021, alleged that "Ginkgo and its leadership distorted the company's finances to gain shareholder approval of a SPAC merger that would take the company public." The court denied the motion to dismiss the Section 10(b) and 14(a) claims in March 2023, and granted final approval of a $17.75 million settlement on 13 December 2024 (Pomerantz LLP).
Part V: 5. Palantir Technologies — HHS Protect, Tiberius, DCIPHER, and CDC Common Operating Picture	Reported dollar figure(s) as transcribed	3. Lead and funding agencies with award identifiers — From USAspending.gov: HHS 75P00120F80084, $17,361,816, "PALANTIR GOTHAM LICENSES," Assistant Secretary for Administration, 13 April 2020; HHS 75P00120F80091, $7,500,000, "PALANTIR HHS PROTECT PLATFORM SERVICES," 22 April 2020; CDC 75D30121C10888, $9,053,707.50 (DCIPHER), 4 June 2021; CDC 75D30122F13061, $12,369,504.86, 17 February 2022; CDC HHSD200201688957C, $5,051,506.23 (2016–2019); FDA 75F40121F80001, $48,154,420.02; plus NIH task orders for N3C, NIDAP, and PEPFAR ranging roughly $3–20 million each (USAspending.gov). The two April 2020 awards were sole-source under a class Justification and Approval citing "unusual and compelling urgency" (FedScoop).

Part / profile	Figure classification	Source text with inline citation
Part V: 5. Palantir Technologies — HHS Protect, Tiberius, DCIPHER, and CDC Common Operating Picture	Reported dollar figure(s) as transcribed	4. Total government funding — HHS's April 2020 sole-source package totaled $24.9 million (FedScoop); the CDC Common Operating Picture contract is $443 million over five years (FedScoop). GAO reported FY2023 operating costs for the underlying systems: Tiberius $84,368,079.00, HHS Protect $28,891,986.28 (staffed by 1.5 federal FTEs and 90 contractors), DCIPHER $24,049,638.81, and ASPR Ready $3,000,000 (GAO-24-106638). Note that GAO's report does not name Palantir; the attribution of these systems to Palantir rests on the company's and CDC's own descriptions (FedScoop).
Part V: 5. Palantir Technologies — HHS Protect, Tiberius, DCIPHER, and CDC Common Operating Picture	Reported dollar figure(s) as transcribed	5. Software / data platforms — Palantir Gotham licenses and the HHS Protect platform (USAspending.gov). HHS Protect was assembled from eight commercial software components drawing on more than 200 datasets, including a $20 million artificial-intelligence system (Center for Public Integrity, secondary). Common Operating Picture "unites the Palantir-driven Health and Human Services (HHS) Protect, Administration for Strategic Preparedness and Response (ASPR) Engage, Tiberius and DCIPHER programs" (FedScoop).
Part V: 5. Palantir Technologies — HHS Protect, Tiberius, DCIPHER, and CDC Common Operating Picture	Reported dollar figure(s) as transcribed	9. Products / IPO — Palantir listed by direct listing on the New York Stock Exchange on 30 September 2020, one of two concurrent NYSE direct listings that day alongside Asana (Palantir investor relations; NYSE Data Insights). The debut valued the company at $20.6 billion (Reuters, secondary). The listing occurred roughly five months after the sole-source HHS Protect awards (USAspending.gov).
Part V: 5. Palantir Technologies — HHS Protect, Tiberius, DCIPHER, and CDC Common Operating Picture	Reported dollar figure(s) as transcribed	11. HHS / DOD relationships — HHS, CDC, FDA, NIH, and ASPR relationships are documented above (USAspending.gov; GAO-24-106638). Tiberius was the COVID-19 vaccine allocation platform associated with Operation Warp Speed and carried the largest FY2023 cost of the four systems, $84,368,079.00 (GAO-24-106638).
Part V: 6. Veratect Corporation (and the Georgetown Project Argus lineage)	Reported dollar figure(s) as transcribed	2. Active dates / lifecycle — "Veratect was established in 2007" (CSRwire press release, 4 May 2009); described in April 2009 as "a 2-year-old company with fewer than 50 employees" (Phys.org / Associated Press, secondary). Acquired 3 May 2010 by SPADAC in a Buyout/LBO; status " Acquired/Merged"; total raised $4.21 million across two financing rounds (PitchBook).
Part V: 6. Veratect Corporation (and the Georgetown Project Argus lineage)	Reported dollar figure(s) as transcribed	4. Total government funding — Veratect: $0 located in federal award databases (USAspending.gov). Project Argus: no dollar totals were stated in the testimony; the funding sources named are TATRC/USAMRMC, ITIC, DHS, and the Intelligence Community (Wilson testimony). Exact Argus obligation figures — UNVERIFIED — no primary source located in this session.

Part / profile	Figure classification	Source text with inline citation
Part V: 6. Veratect Corporation (and the Georgetown Project Argus lineage)	Reported dollar figure(s) as transcribed	8. Institutional lineage — Georgetown ISIS Center Project Argus (2004–) → Veratect Corporation (2007), carrying Argus director James M. Wilson V, MD as chief scientist (Wilson testimony; Phys.org/AP, secondary) → SPADAC Inc. acquisition, 3 May 2010 (PitchBook) → GeoEye, Inc. acquisition of SPADAC for $46 million ($34.5 million cash, $9 million unregistered GeoEye shares, $2.5 million converted equity from GeoEye's prior investment in SPADAC), agreement signed 4 December 2010, after which "SPADAC will become a wholly owned indirect subsidiary of GeoEye" and "be renamed GeoEye Analytics Inc." (GeoEye Form 8-K, SEC EDGAR). This is the documented pathway by which an intelligence-funded university biosurveillance program's commercial successor was absorbed into a satellite-imagery/geospatial-intelligence contractor. Parallel branch: Ascel Bio, Inc., co-founded by Wilson, "has been accurately forecasting disease outbreaks and outbreak-caused political crisis using OSINT since 2010," and pitched IARPA's Mercury program with Wilson listed as "Co-Founder" and Dr. Norm Kahn as "Consultant" (Ascel Bio poster, iarpa.gov). A further branch, Praecipio International, was founded circa December 2009–2012 by former Veratect staff per LinkedIn profiles (Jane Blake, Heather Baker) — note that the Austin-based Atlassian consultancy "Praecipio" is a different company; the LinkedIn evidence is self-reported and secondary.
Part V: 8. Google Flu Trends (historical)	Reported dollar figure(s) as transcribed	4. Total government funding — $0 located. No US government contract or grant to Google for GFT was found in this session — no verified link found.
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Science Applications International Corp. (SAIC) | HSHQDC06J00331 | DHS — National Biosurveillance Integration System (NBIS) 2.0, 2006–2011 | $22,754,294.20 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| CH2M Hill | HDTRA123F0102 | DTRA — Indonesia | $6,145,181.32 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| CACI NSS | HHSD2002013F55727 | CDC — Biosurveillance Coordination Activity | $5,026,367.27 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Biospatial Inc. | 70RWMD21P00000004 | DHS NBIC — data subscription | $4,117,500 |

Part / profile	Figure classification	Source text with inline citation
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Biospatial Inc. | 70RWMD19C00000007 | DHS | $1,982,875 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Biospatial Inc. | 75D30124P18494 | CDC | $1,629,820 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Biospatial Inc. | 75D30122P13207 | CDC | $640,500 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Biospatial Inc. | 75D30120P09781 | CDC | $234,900 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Biospatial Inc. | 693JJ919C000012 | DOT | $483,500 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Leidos | 0015 | — | $3,692,511.23 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| SCI Consulting | HSHQDC12J00005 | DHS — NBIC IT | $3,316,571.57 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Federal Connect | N0018924FZ563 | Navy — Naval Health Research Center, operational infectious disease biosurveillance | $3,077,399.39 |

Part / profile	Figure classification	Source text with inline citation
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Paragone Solutions | 47QFMA18F0050 | Defense Health Agency | $2,680,018.02 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Paragone Solutions | GS03Q15DSP0002 | DHA | $1,472,984.81 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Red Duke Strategies | 36C26124P1814 | VA — PREADICO | $2,270,643.20 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| MPRI Inc. | HHSD2002012F50070 | CDC — biosurveillance support | $2,203,817.93 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| MPRI Inc. | HHSD2002011F38273 | CDC | $1,562,927.69 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| MPRI Inc. | HHSD2002009F29065 | CDC | $1,020,224.67 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| MPRI Inc. | HHSD2002008F24498 | CDC | $999,999.42 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Lifestock Inc. | HDTRA120C0062 | DTRA | $1,307,118.48 |

Part / profile	Figure classification	Source text with inline citation
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Johns Hopkins University Applied Physics Laboratory | HT001123F0082 | DHA — large-language-model analytics | $1,292,042.81 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| JHU APL | HT001123F0083 | DHA | $1,275,194.70 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Accenture Federal Services | HSHQDC12J00392 | DHS | $1,273,662.11 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| MITRE | HSHQDC13J00362 | DHS | $1,222,139.50 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| CAMRIS | N6264518F9019 | Navy — Egypt/Jordan | $1,066,225.52 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Bitscopic | VA26116F3100 | VA | $1,050,000 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Bitscopic | VA26115F2655 | VA | $970,000 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Carnegie Mellon University | HDTRA118C0008 | DTRA — nowcasting | $1,015,889.74 |

Part / profile	Figure classification	Source text with inline citation
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Kinsa Inc. | FA864923P0205 | Air Force | $74,955 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	| Kinsa Inc. | FA864923P1144 | Air Force | $0 |
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	Identified total across these listed awards: approximately $75.9 million (USAspending.gov).
Part V: 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance")	Reported dollar figure(s) as transcribed	12. Controversies — GAO's September 2024 review of CDC's data systems is the relevant oversight finding, documenting duplication and unrealized consolidation across CDC's platform portfolio (GAO-24-106638). The Kinsa Air Force award FA864923P1144 shows an obligated value of $0, an anomaly worth a follow-up FOIA to AFRL contracting (USAspending.gov).
Part V: Cross-Cutting Findings	Reported dollar figure(s) as transcribed	1. Two firms hold the money. Ginkgo (approximately $185.5 million obligated, plus a $1.1 billion DFC loan authorization and an $8.3 billion DoD IDIQ ceiling position) and Palantir ($443 million CDC contract plus prior awards) together dwarf every other entity in this cluster (USAspending.gov; DFC; FedScoop).
Part V: Cross-Cutting Findings	Reported dollar figure(s) as transcribed	2. Competition was thin at the decisive moments. Palantir's two April 2020 HHS awards were sole-source under an urgency J&A (FedScoop); Ginkgo's 2022 CDC airport genomic testing contract, $62.55 million obligated, drew a single offer (USAspending.gov).
Part V: Cross-Cutting Findings	Reported dollar figure(s) as transcribed	4. Intelligence-funded academic surveillance became geospatial-intelligence corporate property. Georgetown Project Argus (ITIC/DHS/IC funded) → Veratect → SPADAC → GeoEye Analytics, a documented four-step chain ending in a $46 million SEC-filed merger (Wilson testimony; PitchBook; SEC 8-K).
Part VI: 1. Johns Hopkins Center for Health Security (CHS)	Reported dollar figure(s) as transcribed	- CDC — $23.5 million, awarded 19 Sept. 2023, to launch the Center for Outbreak Response Innovation (CORI) (Johns Hopkins Bloomberg School).
Part VI: 1. Johns Hopkins Center for Health Security (CHS)	Reported dollar figure(s) as transcribed	- CDC Region 3 Public Health Preparedness and Response (PHPR) Center, run jointly by CHS and Johns Hopkins CEPAR under the CDC Office of Readiness and Response; total award $9,054,230 across 10 institutions for year one of a five-year cooperative agreement (CHS PHPR page).

Part / profile	Figure classification	Source text with inline citation
Part VI: 1. Johns Hopkins Center for Health Security (CHS)	Reported dollar figure(s) as transcribed	- Open Philanthropy — $16 million over 3 years, Jan.–Feb. 2017 (program officer Jaime Yassif), against a pre-grant Center budget of $5.3 million, raising it to roughly $8 million; approximately $1.3 million/year replaced UPMC unrestricted funding (Open Philanthropy 2017 grant).
Part VI: 1. Johns Hopkins Center for Health Security (CHS)	Reported dollar figure(s) as transcribed	- Open Philanthropy — $10,000,000 over 3 years, 2023 (Open Philanthropy 2023 grant).
Part VI: 1. Johns Hopkins Center for Health Security (CHS)	Reported dollar figure(s) as transcribed	8. Institutional lineage — the 2003 move (documented in detail). UPMC announced on 17 Sept. 2003 that the Johns Hopkins biodefense group would join UPMC effective 1 Nov. 2003 as the new Center for Biosecurity of UPMC, headquartered in Baltimore with offices in Pittsburgh and Washington; eight faculty received University of Pittsburgh academic appointments; Tara O'Toole became CEO, Thomas V. Inglesby COO, and D.A. Henderson senior advisor; UPMC President Jeffrey Romoff and Pitt Chancellor Mark Nordenberg are named in the announcement, which also notes federal bioterrorism funding rose from $8 million in 1998 to $4.5 billion in 2003 and that UPMC provided a "generous endowment" (UPMC announcement). CIDRAP's contemporaneous account adds that four full-time faculty and 16 administrative staff departed Johns Hopkins and that the Bloomberg School responded by forming its own Institute for Global Health and Security (CIDRAP) — secondary source, corroborating the primary UPMC release.
Part VI: 1. Johns Hopkins Center for Health Security (CHS)	Reported dollar figure(s) as transcribed	11. HHS/NIH vs DOD/DTRA relationship. Both, concurrently and by the Center's own listing. HHS side: BARDA, CDC, FDA, ASPR (2017 report) plus the $23.5M CDC CORI award (JHSPH). DOD side: Defense Threat Reduction Agency and the US Naval Postgraduate School in 2017 (2017 report) and "US Department of Defense" as a line item in 2018 (2018 report). No award numbers are published for any of the DOD or DHS lines — UNVERIFIED — no primary source located for the DTRA and NBACC contract identifiers or dollar values.
Part VI: 1. Johns Hopkins Center for Health Security (CHS)	Reported dollar figure(s) as transcribed	13. Key personnel. D.A. Henderson (founder, 1998; senior advisor from 2003); Tara O'Toole (Deputy Director 1998/99–2001, Director CCBS 2001–2003, Director/CEO Center for Biosecurity 2003–2009, DHS Under Secretary for Science & Technology 4 Nov. 2009 – 23 Sept. 2013 overseeing an FY13 budget of roughly $1 billion and 800 staff, In-Q-Tel EVP from March 2014; earlier DOE Assistant Secretary for Environment, Safety & Health 1993–1997; FAS Board Chair 2006–07; appointed in 2006 to the board of Google Foundation's INSTEDD) (O'Toole CV; DHS archive); Thomas V. Inglesby (COO 2003, Director as of 2018) and Anita Cicero, JD (Deputy Director) (2018 Annual Report); Eric Toner (lead, Clade X and Event 201), Crystal Watson, Tara Kirk Sell, with Ryan Morhard (World Economic Forum) and Jeffrey French (Gates Foundation) as the external Event 201 leads (Event 201).
Part VI: 2. University of Pittsburgh / UPMC Center for Biosecurity (2003–2017)	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. Funded by a UPMC endowment plus federal grants and contracts; the Open Philanthropy record confirms that roughly $1.3 million per year of UPMC unrestricted funding was being replaced by philanthropy at the point of the 2017 return to Hopkins (Open Philanthropy). No UPMC-era federal award numbers are published — UNVERIFIED — no primary source located.

Part / profile	Figure classification	Source text with inline citation
Part VI: 2. University of Pittsburgh / UPMC Center for Biosecurity (2003–2017)	Reported dollar figure(s) as transcribed	12. Controversies. The 2003 departure stripped Johns Hopkins of four full-time faculty and 16 staff and forced the Bloomberg School to stand up a replacement institute (CIDRAP — secondary). The move occurred in the exact period the UPMC release documents federal bioterrorism funding rising from $8 million (1998) to $4.5 billion (2003) — a 562-fold increase (UPMC).
Part VI: 3. Georgetown University Center for Global Health Science and Security (CGHSS / GHSS) — and Project Argus	Reported dollar figure(s) as transcribed	4. Total government funding. Open Philanthropy — $3.5 million over three years, announced 23 Mar. 2017, for biosecurity and pandemic-preparedness policy research including "international best practices for building laboratory capacity of biosurveillance systems" (Georgetown University Medical Center release). No federal total is published for either CGHSS or Argus. UNVERIFIED — no primary source located.
Part VI: 4. George Mason University — National Center for Biodefense and Infectious Diseases, Biomedical Research Laboratory, and Schar School Biodefense Program	Reported dollar figure(s) as transcribed	3. Lead & funding agencies. NIAID provided the federal construction grant. Figures differ across Mason's own publications: the Schar School says "$25 million grant from the National Institutes of Health and a matching grant, plus the land" (Schar School), while the Mason College of Science profile of the lead PI states the project totaled $50.5 million — $27.7 million from NIAID, $20 million in Mason matching funds, and $2.5 million from the Commonwealth of Virginia for land acquisition (Mason Science). Both figures are reported here as a range per sourcing rules. The FAS record lists Charles Bailey as grant PI (FAS).
Part VI: 4. George Mason University — National Center for Biodefense and Infectious Diseases, Biomedical Research Laboratory, and Schar School Biodefense Program	Reported dollar figure(s) as transcribed	4. Total government funding. Construction: $27.7 million NIAID within a $50–50.5 million project (Mason Science; GMU News). Program funding attributable to PI Charles Bailey: 27 funded proposals totaling approximately $51 million, of which $36 million with Bailey as PI or co-PI (Mason Science). No specific NIAID grant number is published on any of these pages — UNVERIFIED — no primary source located for the NIAID construction award identifier.
Part VI: 4. George Mason University — National Center for Biodefense and Infectious Diseases, Biomedical Research Laboratory, and Schar School Biodefense Program	Reported dollar figure(s) as transcribed	11. HHS/NIH vs DOD relationship. HHS/NIH side: NIAID construction grant and the RBL network (Mason Science). DOD side: DTRA appears as a top employer of Schar School biodefense graduates (Schar School), and per the LA Times (secondary), Mason-affiliated Advanced Biosystems won a $3.59 million DARPA contract in July 2001 and Alibek sought a further $10 million from DTRA, with additional federal research money from the Army Medical Research and Materiel Command, NIH, DOE, and the State Department; AFG Biosolutions won more than $1 million in NIH SBIR grants between 2005 and 2007 (Los Angeles Times). No contract numbers were located for any of these — UNVERIFIED — no primary source located.
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	- UC7AI180308 — initial obligations $2,751,527; current total obligations $8,392,076, an increase of 205% (HigherGov). That 205% escalation on a biocontainment-enhancement cooperative agreement is a legitimate audit flag.

Part / profile	Figure classification	Source text with inline citation
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	- 1G20AI167348-01 — $3,299,989 (Pandemic PACT).
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	- NIAID RBL construction grant — $17 million, awarded late 2003, for the 33,850-square-foot facility; CSU added $10 million of its own (CSU News, 1 June 2005).
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	- NIAID RCE — $40 million over four years, awarded 1 June 2005 (CSU News).
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	- CDC RaHP VEC — $8.75 million over five years, 9 Aug. 2023 (CSU News).
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	- CDC co-located capital investment — CDC broke ground in August 2004 on an $80 million, 156,000-square-foot infectious disease facility at CSU's Foothills Research Campus (CSU News).
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	- CDC's Regional Training and Evaluation Center program, established 2023, distributed $7.14 million in first-year funding across five awardees: Cornell, Penn State, Colorado State, the City of New Orleans Termite and Rodent Control Board, and the Puerto Rico Science, Technology and Research Trust (CDC).
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	11. HHS/NIH vs DOD relationship. CSU's biocontainment portfolio as documented is exclusively HHS: NIAID (construction, upgrade, UC7 enhancement) and CDC (RaHP VEC, TEC program, the co-located $80M facility), plus USDA as a consortium member (NIAID; HigherGov; CDC). No DTRA, DARPA, DOD, or BARDA award to CSU was located in this audit — CSU is the clearest single-channel (HHS-only) entity in this cluster on the record examined.

Part / profile	Figure classification	Source text with inline citation
Part VI: 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. The 205% obligation growth on UC7AI180308, from $2,751,527 to $8,392,076 (HigherGov). Also worth noting: research contacts at the RMRBL include Rebekah Kading, whose listed focus is bat (Chiroptera) surveillance for pandemic pathogens, alongside Tony Schountz, Greg Ebel, Angela Bosco-Lauth, and Richard Bowen (NIAID) — bat coronavirus surveillance at an NIAID-funded BSL-3 is a legitimate follow-on FOIA target for grant abstracts and biosafety committee minutes.
Part VI: 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM)	Reported dollar figure(s) as transcribed	- Vehicle ceiling: $3,287,644,215, of which 13% used; total obligated through the vehicle: $426,860,757; obligated directly to the IDV: $153,365,693.41; budget funding total $246,946,138; 7 bids received under full and open competition (HigherGov).
Part VI: 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM)	Reported dollar figure(s) as transcribed	- Task Order 75A50120F33002: $264,693,063, awarded 23 July 2020; TAMUS pays 38% of construction costs (KEI).
Part VI: 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM)	Reported dollar figure(s) as transcribed	- BARDA's own 2014 briefing gives the Texas A&M CIADM a five-year base of $176 million; the other two CIADMs were Emergent Manufacturing Operations Baltimore LLC (Baltimore and Gaithersburg, MD; 8-year base; $163 million) and Novartis (Holly Springs, NC; 4-year base; $60 million) (BARDA Industry Day).
Part VI: 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM)	Reported dollar figure(s) as transcribed	- Texas A&M's own history page gives an initial five-year contract value of $285 million, composed of $176.6 million US government, $40 million State of Texas, $20 million TAMUS, and roughly $50 million from private partners (TAMU CIADM history). The $176M/$176.6M base figures are consistent across BARDA and TAMU sources; the $285M total is the blended public-private figure.
Part VI: 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM)	Reported dollar figure(s) as transcribed	- NCTM (2024): 148 trainees, more than $12.5 million in awards from NSF and NIIMBL, two new courses, contract research for eight clients (NCTM 2024 Performance Report).

Part / profile	Figure classification	Source text with inline citation
Part VI: 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM)	Reported dollar figure(s) as transcribed	11. HHS/BARDA vs DOD relationship. Primary channel is HHS/ASPR/BARDA via HHSO100201200002I (HigherGov). The DOD channel enters through the customer: the Department of Defense separately awarded Novavax $1.6 billion — of which $1.2 billion for clinical work, $418 million for manufacturing 100 million doses, and $5 million for animal studies — plus a further $60 million (KEI). NCTM's 2024 non-BARDA funding came from NSF and NIIMBL (NCTM 2024 Report).
Part VI: 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM)	Reported dollar figure(s) as transcribed	- Ordering-period truncation. The vehicle's ordering period was cut from 14 June 2037 to 14 March 2024 — a 13-year reduction on a contract publicly described by the university as a 25-year commitment (HigherGov; TAMU CIADM history). Against a $3.29 billion ceiling, only 13% was used (HigherGov).
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	- DARPA — a $7,483,871 contract option under SIGMA+, dated 24 Jan. 2020, place of performance Columbus, OH (OrangeSlices).
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	- DTRA HDTRA1-26-C-0004 — awarded amount $52,876,517; base plus all options $93,261,299; $9,500,000 obligated at award from fiscal 2025 Cooperative Threat Reduction funds; four proposals received via SAM.gov (OrangeSlices; GovBrew).
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	- NBACC 2015 award — more than $480 million over 10 years, structured as "a series of five, one-year contracts each with a one-year award term extension" (Global Biodefense).
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	- Organization-wide (IRS Form 990) — fiscal year ending September 2024: revenue $13,349,081,113, expenses $13,369,912,851, net −$20,831,738. Prior years: September 2023 revenue $12,464,254,299; September 2019 $8,259,952,869; September 2018 $5,087,879,187 (ProPublica Nonprofit Explorer). Anomaly: revenue rose 62% in a single fiscal year, FY2018 → FY2019, from $5.09 billion to $8.26 billion, and then a further 62% by FY2024 — a nonprofit charity operating at a scale exceeding most Fortune 500 companies.
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	8. Institutional lineage. December 2006 initial NBACC M&O contract → 14 May 2007 FY2007 Sponsoring Agreement (HSHQDC-07-C-00020) → 2015 ten-year >$480M award → DHS announcement of intent to sole-source the next-generation $480 million, ten-year cost-reimbursement hybrid (CPFF and CPAF) re-award (DHS Sponsoring Agreement; Global Biodefense).

Part / profile	Figure classification	Source text with inline citation
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	- GAO protest denial B-413570.3, B-413570.4, B-413570.5, decided 23 May 2017: Battelle protested the DTRA award under RFP HDTRA-16-R-0001 (published 3 March 2016) covering the Cooperative Biological Engagement Program (CBEP) and STEP. Leidos won despite bidding higher — Battelle's price was $153,023,048 against Leidos's $170,219,528, a $17.2 million premium. Eleven offerors bid; four made the competitive range. Battelle's protest turned in part on two missing Past Performance Questionnaires from subcontractors. GAO denied the protest (GAO B-413570.3 et al.).
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	- Sole-source intent on the $480 million ten-year NBACC re-award (Global Biodefense).
Part VI: 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC)	Reported dollar figure(s) as transcribed	- Executive compensation. CEO Lewis Von Thaer was compensated $5,569,100 in FY2024 at a tax-exempt organization (ProPublica Nonprofit Explorer).
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	- CDC — a five-year IDIQ worth up to $148,000,000 for "Diagnostic Test Development and Production for Emergency Response," announced 11 March 2026 (MRIGlobal press release).
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	- DTRA — contract HDTRA1-15-C-0007, modification P00017, a sole-source extension of the West Africa mobile laboratory mission, six months plus a three-month option, not to exceed $13,913,121; original contract end 27 December 2015 (DTRA justification / SAM record).
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	- DTRA — a $14.8 million, three-year "Sample-to-Sequence" award announced 25 Feb. 2015 (MRIGlobal).
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	- Pentagon Force Protection Agency — CBRNE laboratory analysis and collection services, up to $17,864,802.00 over five years, solicitation HQ0034-12-R-3022, reported 1 Oct. 2012 (Global Biodefense).
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	- USDA — a $7 million IDIQ, June 2021, "Operational and Science Training Services" for the National Bio and Agro-Defense Facility (NBAF) (MRIGlobal).
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	4. Total government funding. No consolidated total is published. Documented items sum to at least $201.6 million in ceiling value across the CDC IDIQ ($148M), PFPA ($17.86M), DTRA sample-to-sequence ($14.8M), DTRA West Africa extension ($13.9M), and USDA NBAF IDIQ ($7M). UNVERIFIED — no primary source located for an all-agency cumulative figure.

Part / profile	Figure classification	Source text with inline citation
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	11. HHS vs DOD relationship. Genuinely dual-channel and, unusually, the DOD side is older and deeper. DOD/DTRA: HDTRA1-15-C-0007 (CBEP/CTR), the $14.8M sample-to-sequence award, the PFPA CBRNE contract, and the JPEO-CBD HD TAT contract (Global Biodefense; MRIGlobal; Global Biodefense; MRIGlobal). HHS: the $148 million CDC diagnostic-production IDIQ of March 2026 is the largest single item located and marks a substantial shift of this DOD-heavy contractor into CDC emergency diagnostics (MRIGlobal).
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	- Sole-source extension during the Ebola response. Modification P00017 to HDTRA1-15-C-0007 was a sole-source extension worth up to $13,913,121 (Global Biodefense). Sole-source awards of that size warrant the underlying Justification and Approval document via FOIA to DTRA.
Part VI: 8. MRIGlobal (formerly Midwest Research Institute)	Reported dollar figure(s) as transcribed	- The March 2026 CDC award timing. A $148 million CDC emergency-diagnostics IDIQ to a DOD-heavy contractor, announced 11 March 2026, is the single largest new HHS commitment identified in this cluster and should be tracked on USAspending for task-order issuance (MRIGlobal).
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- Fold F(x) ("Folded Non-Natural Polymers with Biological Function") — a $10 million contract to SRI Biosciences; contract number not stated by the source (CBRNE Central).
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- Brandeis program — $8.5 million (Washington Technology).
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- HR001120C0099: potential award $25,681,068; total obligated $24.0M; current award $25.4M; 93% funded; funded backlog $1,400,000; total backlog $1,707,280; cost-plus-fixed-fee; 9 bidders; full and open competition; the potential award value increased 142%, from $10,610,034 to $25,681,068, while the potential end date was extended from 8 April 2025 to 1 March 2026; $1,538,213 (6%) of this contract "was funded by COVID-19 emergency acts including the CARES Act"; federal account Research, Development, Test, and Evaluation, Defense-Wide (097-0400); 96% complete; place of performance Menlo Park, CA 94025; last modified 14 July 2025 (HigherGov).
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- HR001124C0437: potential award $16,800,423; current award and total obligated $6.7M; total backlog $10,131,347; 40% funded; 37% complete; cost-plus-fixed-fee; 16 bidders; duration 3 years 8 months; current end date 31 Dec. 2027; place of performance Princeton, NJ 08540; estimated average FTE 25; last modified 21 May 2025 (HigherGov).
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- Fold F(x): $10 million (CBRNE Central).
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- Brandeis: $8.5 million (Washington Technology).
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- Task-scope inflation. HR001120C0099's potential value rose 142% — from $10,610,034 to $25,681,068 — with an eleven-month schedule extension (HigherGov).

Part / profile	Figure classification	Source text with inline citation
Part VI: 9. SRI International	Reported dollar figure(s) as transcribed	- CARES Act money in a DARPA basic-research contract. $1,538,213 (6%) of HR001120C0099 "was funded by COVID-19 emergency acts including the CARES Act," and the budget-funding table shows that entire $1,538,213 booked to RDT&E, Defense-Wide (097-0400) under object class 25.5, research and development contracts (HigherGov). Pandemic emergency appropriations flowing into a DARPA research contract is an appropriations-tracing anomaly worth documenting.
Part VI: Cross-Cluster Findings	Reported dollar figure(s) as transcribed	4. DHS — the sole-source justification for the next-generation $480 million NBACC re-award to BNBI (Global Biodefense).
Part VI: Cross-Cluster Findings	Reported dollar figure(s) as transcribed	5. DARPA — contract file for Advanced Biosystems' $3.59 million July 2001 award, the only route to converting the LA Times Alibek reporting into a primary record (Los Angeles Times).
Part VI: Cross-Cluster Findings	Reported dollar figure(s) as transcribed	6. NIAID — the grant number and award file for the $27.7 million GMU Biomedical Research Laboratory construction grant, which appears in no public database record located here (Mason Science).
Part VII: Cluster Summary	Reported dollar figure(s) as transcribed	Between 2014 and 2026 the United States built, financed, and then partially dismantled the world's largest government-run infectious-disease surveillance architecture outside its own borders. The spine of that architecture is the Global Health Security Agenda (GHSA), launched at HHS headquarters in Washington, DC on 13 February 2014 with 28 countries present (Obama White House fact sheet), codified by Executive Order 13747 on 4 November 2016 (American Presidency Project text), and grown to 71 countries and 12 international organizations by end-2023 (GHSA 2028 Framework). GAO found that USAID and CDC together obligated $1.251 billion and disbursed $1.022 billion in GHSA funds from FY2015–FY2019 appropriations as of 31 March 2020 (GAO-21-359).
Part VII: Cluster Summary	Reported dollar figure(s) as transcribed	Financing was progressively externalized into multilateral vehicles. The Pandemic Fund at the World Bank — established September 2022, launched by the G20 in November 2022 — received $700 million in US pledges by May 2023 and an additional up to $667 million announced by Treasury Secretary Janet Yellen on 24 July 2024 (Treasury JY2481). Simultaneously, PEPFAR's HIV/TB laboratory and informatics estate — more than $130 billion appropriated FY2003–FY2026 (KFF) — was converted into pandemic surveillance infrastructure, running 3,341,592 SARS-CoV-2 tests through PEPFAR-supported centralized laboratories in 11 countries in one year, equal to 42% of those countries' national testing volumes (EID 28(13)).
Part VII: Cluster Summary	Reported dollar figure(s) as transcribed	Private foundations occupy the outer ring. The $100 million Africa Pathogen Genomics Initiative, launched 12 October 2020, is the single clearest documented case of Gates Foundation and US federal (CDC Advanced Molecular Detection) co-funding of a biosurveillance program, alongside Illumina, Oxford Nanopore, and Microsoft (African Union). The Nuclear Threat Initiative's biosecurity work is funded by Open Philanthropy and Gates, not by the US government on the record available (Open Philanthropy). The Rockefeller Foundation's Pandemic Prevention Institute, capitalized at up to $150 million in 2021 and led by former BARDA director Rick Bright, folded in September 2022 with no verified US federal funding or contract located.

Part / profile	Figure classification	Source text with inline citation
Part VII: Cluster Summary	Reported dollar figure(s) as transcribed	3. USAID spent at least $270,969, and by a second FOIA-based account $1.3 million (2016–2019), cultivating the privately incorporated Global Virome Project while its own official, Dennis Carroll, was simultaneously a GVP principal (U.S. Right to Know, secondary).
Part VII: Cluster Summary	Reported dollar figure(s) as transcribed	4. Congress authorized $5.0 billion for global health security in P.L. 117-263 but never enacted the $6.5 billion mandatory funding proposal it was meant to substitute for (CRS IF12590).
Part VII: Cluster Summary	Reported dollar figure(s) as transcribed	5. The Pandemic Fund's largest single regional award — $39,996,957.75 to Africa CDC for HARMONIZE — carries $234,198,132 in claimed co-financing, a 5.9:1 leverage ratio whose in-kind versus in-cash split is not disclosed (Pandemic Fund).
Part VII: 1. Global Health Security Agenda (GHSA)	Reported dollar figure(s) as transcribed	4. Total government funding. GAO's audited figures, as of 31 March 2020, using FY2015–FY2019 appropriations: USAID obligated $655 million and disbursed $498 million; CDC obligated $596 million and disbursed $524 million — combined $1.251 billion obligated / $1.022 billion disbursed across at least 34 countries, 25 of them GHSA partner countries (GAO-21-359). Program-line detail, enacted, in millions: USAID pandemic influenza/other emerging threats 72.5 (FY17), 72.5 (FY18), 100.0 (FY19), 100.0 (FY20) with 115.0 requested (FY21); CDC global health protection 55.1, 108.2, 107.8, 183.2, with 225.0 requested (CRS IF11461). The broader whole-of-government global health security account totals compiled by KFF, in millions: 366.2 (FY13), 498.5 (FY14), 1,341.6 (FY15), 552.1 (FY16), 364.1 (FY17), 512.3 (FY18), 503.5 (FY19), 537.8 (FY20), 1,674.5 (FY21), 1,241.0 (FY22), 1,486.9 (FY23), 1,900.3 (FY24 request) (KFF). Presidential commitments: Obama pledged more than $1 billion over five years to help at least 30 countries, later specified as $1 billion to 17 at-risk countries announced July 2015 (American Presidency Project fact sheet); the G7 matched with a commitment covering at least 60 countries in 2015 (CRS IF11461). Congress authorized $5.0 billion over five years in the Global Health Security and International Pandemic Prevention, Preparedness and Response Act of 2022, Title LV of P.L. 117-263 (CRS IF12590).
Part VII: 1. Global Health Security Agenda (GHSA)	Reported dollar figure(s) as transcribed	11. Relationship to HHS/NIH/NIAID and DOD/DTRA/DARPA components. HHS, CDC, NIH, FDA, and ASPR are all named participants in the 2024 Strategy's whole-of-government annex, alongside the Defense Threat Reduction Agency and the Development Finance Corporation (2024 GHS Strategy). DOD's contribution to the global health security account is carried in two lines — Biological Threat Reduction Program (BTRP) and Global Emerging Infections Surveillance (GEIS) — totaling $256.6M (FY13) rising to $293.7M (FY23), with BTRP alone at $235.0 million in FY2023 and GEIS at $58.7 million (KFF). No DARPA or JPEO-CBRND role in GHSA appears in the documents opened — no verified link found.

Part / profile	Figure classification	Source text with inline citation
Part VII: 1. Global Health Security Agenda (GHSA)	Reported dollar figure(s) as transcribed	12. Controversies, GAO/IG findings, anomalies. GAO-21-359 (public report April 2021, letter dated 14 April 2021; sensitive version GAO-21-213SU issued 4 February 2021; French translation GAO-21-484), prepared under a mandate from House Report 114-693 with GAO contact David Gootnick, found that CDC's entire GHSA program during FY2015–FY2019 depended on one expiring Ebola supplemental appropriation ($597 million to CDC, expiring at end of FY2019), while USAID's Ebola appropriation was non-expiring (GAO-21-359). Structural anomaly: the Agenda's 2024 target of more than 100 countries with Demonstrated Capacity in at least five technical areas stood at 56 countries as of end-2022 (GHSA 2028 Framework) — roughly half the goal with two years to run. Statutory anomaly: E.O. 13747 §2(b)(i)(7) required an overall five-year GHSA review submitted to the President by September 2019 (E.O. 13747); no public copy of that review was located in this session — UNVERIFIED — no primary source located. Compliance anomaly: the Global Health Security Act required a strategy within 180 days of December 2022 enactment; as of 8 February 2024 CRS recorded that the administration had still not published one "per se" (CRS IF12590) — it appeared April 2024, roughly nine months late (2024 GHS Strategy).
Part VII: 2. International Health Regulations (2005): US Implementation, CDC's Role, and the Joint External Evaluation	Reported dollar figure(s) as transcribed	4. Total government funding. No discrete US appropriation for IHR implementation was identified in the sources opened. Notably, when WHO designated CDC's GDD program a Collaborating Center for Implementation of IHR National Surveillance and Response Capacity in 2009, it did so with no budget support attached (Stimson). Adjacent US contributions to WHO ranged from $163 million to $816 million annually over the decade preceding withdrawal, with US assessed contributions set at the maximum 22% rate and running $109–122 million annually in FY2017–FY2024; voluntary contributions ranged from a $105 million low (FY2020) to a $694 million high (FY2022), making the US the largest donor at 15.6% of WHO total revenue in the 2022–2023 biennium (KFF WHO page).
Part VII: 3. CDC Global Disease Detection Program and Global Disease Detection Operations Center (GDDOC)	Reported dollar figure(s) as transcribed	4. Total government funding. The peer-reviewed program review states no annual or center-level funding figures, noting only that the number of projects per center varied partly because of available funding and staffing (Rao, PMC5711302). The relevant appropriation envelope is CDC's Global Public Health Protection line: $54.3M (FY13), $62.6M (FY14), $55.1M (FY15 base, plus $597M emergency Ebola), $55.2M (FY16), $58.2M (FY17), $108.2M (FY18), $108.2M (FY19), $183.2M (FY20), $203.2M base (FY21, plus $750M emergency COVID-19), $253.2M (FY22), $293.2M (FY23), $353.2M requested (FY24) (KFF).
Part VII: 5. The Pandemic Fund (World Bank FIF)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies; award IDs. US contributions are authorized by the Global Health Security Act of 2022 (Title LV, P.L. 117-263), which permits US contributions of up to 33% of contributions from all sources (CRS IF12590). Contributions were drawn from USAID COVID-19 emergency supplemental funds ($250M, FY2021), the USAID Global Health Programs account ($200M FY2022; $250M planned FY2023), with $500M requested through the Department of State for FY2024 (KFF). Treasury announced the 2024 tranche (Treasury JY2481).

Part / profile	Figure classification	Source text with inline citation
Part VII: 5. The Pandemic Fund (World Bank FIF)	Reported dollar figure(s) as transcribed	4. Total government funding. US pledges: $250 million (September 2021, first Global COVID-19 Summit), +$200 million (May 2022), +$250 million (May 2023), totaling $700 million, of which $450 million had been paid in as of May 2023 — roughly 40% of all financing the Fund had then received, making the US the largest single donor (KFF Pandemic Fund). Treasury Secretary Janet Yellen announced up to $667 million more on 24 July 2024 at the G20 in Rio de Janeiro, subject to congressional appropriations and running through 2026; Germany announced $54 million the same day (Treasury JY2481; World Bank). At the Fund's one-year anniversary Yellen stated the US had "already contributed $700 million" and was requesting $500 million more in the FY24 budget (Treasury JY1751). Fund-wide: seed capital of $2 billion from 27 contributors (World Bank; corroborated in the 2024 GHS Strategy); 18 founding financial contributors and more than US$2.1 billion committed (Pandemic Fund).
Part VII: 5. The Pandemic Fund (World Bank FIF)	Reported dollar figure(s) as transcribed	5. Software, hardware, platforms. Not a technology program; it is a grant-making financial intermediary fund. First call awarded $338 million to 37 countries; second call approximately $500 million (KFF Pandemic Fund).
Part VII: 5. The Pandemic Fund (World Bank FIF)	Reported dollar figure(s) as transcribed	6. Entities involved. Governance: a board of 21 voting seats — 9 contributor, 9 co-investor, 1 philanthropy, 2 civil society — with the US holding one contributor seat; the Technical Advisory Panel is chaired by Mike Ryan (WHO) with vice-chair Joy St. John (KFF Pandemic Fund). Philanthropic contributors: Gates Foundation $15 million, Rockefeller Foundation $15 million, Wellcome Trust approximately $12 million (KFF Pandemic Fund); NTI committed $35,000 (NTI). Founding contributors include the US, Gates, Rockefeller, and Wellcome (Pandemic Fund). Implementing entities on the Africa CDC award: African Development Bank, FAO, and UNICEF, with partners including the African Society for Laboratory Medicine, Team Europe Initiative, and Resolve to Save Lives (Pandemic Fund HARMONIZE).
Part VII: 5. The Pandemic Fund (World Bank FIF)	Reported dollar figure(s) as transcribed	8. Institutional lineage. The Fund is the financing successor to the bilateral GHSA model: the Global Health Security Act authorized US participation (CRS IF12590), and the 2024 GHS Strategy credits the Fund with catalyzing $2 billion from 27 contributors (2024 GHS Strategy).
Part VII: 5. The Pandemic Fund (World Bank FIF)	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. (a) The $6.5 billion mandatory funding proposal in the FY2023 State/Foreign Operations budget justification — $4.5B seed for the Pandemic Fund, $1.0B bilateral, $500M CEPI, $500M Emergency Reserve Fund — was never enacted; Congress substituted a $5.0 billion authorization with no matching appropriation (CRS IF12590). (b) The US board seat is institutional; the individual occupying it is not named in the sources opened — UNVERIFIED — no primary source located. (c) Leverage anomaly on the largest regional award: $39,996,957.75 approved against $234,198,132 in "in kind & in cash" co-financing and $68,113,959 in Africa CDC co-investment, with the in-kind/in-cash split undisclosed (Pandemic Fund HARMONIZE).

Part / profile	Figure classification	Source text with inline citation
Part VII: 6. PEPFAR Infrastructure Repurposed for Pandemic Surveillance	Reported dollar figure(s) as transcribed	4. Total government funding. More than $130 billion appropriated FY2003–FY2026 (KFF PEPFAR). Selected years: $822 million (FY2003, pre-PEPFAR bilateral HIV), $1.9 billion (FY2004), $5.0 billion bilateral peak (FY2010), a decline of more than $750 million FY2010–FY2013, $3.8 billion in FY2021 emergency supplemental ($250M bilateral HIV + $3.5B to the Global Fund), $2.0 billion to the Global Fund in FY2023, and $6.0 billion total in FY2026 ($4.7B bilateral + $1.3B multilateral, comprising $1.25B Global Fund and $45M UNAIDS); FY2026 Global Fund support is $400 million below FY2025 and is the first installment of a $4.6 billion US pledge for the 2026–2028 replenishment; cumulative US Global Fund contributions FY2001–FY2026 total almost $33 billion (KFF PEPFAR). PEPFAR health-systems-strengthening investments were reported at $1.129 billion in FY2023 (USAID FY23 HSS Report to Congress.pdf)).
Part VII: 7. Global Virome Project (and the PREDICT / STOP Spillover Lineage)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies; award IDs. STOP Spillover: USAID award 7200AA20RFA00007, recipient Tufts University (USAID; STOP Spillover Year 3 Annual Report). GVP itself: USAID states it provided no funding after GVP's formal incorporation; documents obtained under FOIA indicate the USAID EPT Division spent at least $270,969 on GVP-related work, and a later account puts total USAID underwriting at $1.3 million, 2016–2019 (USRTK, secondary; USRTK, secondary). Both USRTK figures are secondary reporting based on FOIA documents and are flagged as such; the underlying obligation records were not independently retrieved from USAspending or FPDS in this session.
Part VII: 7. Global Virome Project (and the PREDICT / STOP Spillover Lineage)	Reported dollar figure(s) as transcribed	4. Total government funding. PREDICT: $207 million, 2009–2019 per CRS (CRS IF11461); USRTK reports it as a $210 million "proof of concept" (USRTK, secondary) — the $207M vs. $210M discrepancy is unresolved; CRS is the primary-adjacent source. STOP Spillover: $100 million over five years (USAID). GVP estimated total cost: $1.2 billion (Wikipedia) — a secondary encyclopedic source; treat as indicative.
Part VII: 7. Global Virome Project (and the PREDICT / STOP Spillover Lineage)	Reported dollar figure(s) as transcribed	8. Institutional lineage. USAID EPT → PREDICT (2009–2020) → GVP (proposed private successor, 2017–) and STOP Spillover (official USAID successor, 2020–) (CRS IF11461; USAID). Personnel continuity is the defining feature: Dennis Carroll ran USAID's EPT/PREDICT portfolio and simultaneously became a GVP principal, receiving $166,500 in 2019, with Peter Daszak as GVP secretary/treasurer (USRTK, secondary).

Part / profile	Figure classification	Source text with inline citation
Part VII: 8. Nuclear Threat Initiative / bio, the Global Health Security Index, and the Biosecurity Innovation and Risk Reduction Initiative (BIRRI)	Reported dollar figure(s) as transcribed	4. Total funding. GHS Index: an Open Philanthropy February 2017 planning grant (amount not stated on the grant page) plus $3,556,773 over two years (Open Philanthropy); NTI separately reports an Open Philanthropy grant of $6 million over three years and $250,000 from the Gates Foundation (NTI); the 2019 Index credits Open Philanthropy, the Gates Foundation, and the Robertson Foundation (2019 GHS Index); a separate reported planning grant of $476,859 is recorded in the same Open Philanthropy grant family (Open Philanthropy). Organizational finances (IRS Form 990 data via ProPublica): FY2024 revenue $19,649,784, expenses $26,073,759, net −$6,423,975, total assets $92,105,358; FY2019 revenue spiked to $41,778,299; FY2017 revenue $39,240,950 (ProPublica Nonprofit Explorer). NTI committed $35,000 to the World Bank pandemic FIF (NTI GHS Index). A secondary tracker states NTI "does not accept funding from the U.S. government but does accept funding from other governments," reporting $438,720 in 2024 government grants from Global Affairs Canada (InfluenceWatch, secondary) — flagged as secondary; the Canadian figure was not confirmed against NTI's Form 990 in this session.
Part VII: 8. Nuclear Threat Initiative / bio, the Global Health Security Index, and the Biosecurity Innovation and Risk Reduction Initiative (BIRRI)	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. (a) Predictive-validity failure: the inaugural 2019 GHS Index ranked the United States first on the strength of its laboratories, scientific staff, Strategic National Stockpile, and emergency distribution and communication plans (NTI GHS Index) — months before the worst-performing pandemic outcome among large wealthy nations; NTI's own page cites a BMJ Global Health study finding the pandemic was less deadly in high-ranking countries, while an independent evaluation finds the opposite pattern for the US relative to Bangladesh (*International Health*). (b) Governance gap NTI itself documents: per the GHS Index, 94% of countries have no national-level oversight measures for dual-use research (NTI IBBIS). (c) Financial trajectory: NTI ran deficits in five of the last six reported fiscal years — −$8,255,709 (2020), −$9,286,382 (2021), −$5,389,499 (2022), +$946,935 (2023), −$6,423,975 (2024) (ProPublica). (d) Disclosure gap: NTI's own financials page lists Form 990s and annual reports but states no revenue, expenses, donors, or biological-program budget (NTI financials).
Part VII: 8. Nuclear Threat Initiative / bio, the Global Health Security Index, and the Biosecurity Innovation and Risk Reduction Initiative (BIRRI)	Reported dollar figure(s) as transcribed	13. Key personnel and cross-program appointments. Jaime Yassif — Open Philanthropy grant investigator for the GHS Index grant (Open Philanthropy) and subsequently NTI's VP, Global Biological Policy and Programs ($288,405 compensation, FY2024) (ProPublica) — a grantmaker-to-grantee transition worth noting. Elizabeth (Beth) Cameron, VP Global Biological Policy & Programs FY2017–FY2021, later served on the National Security Council (ProPublica; NSC service UNVERIFIED — no primary source located in this session). Margaret Hamburg, former FDA Commissioner, served as Interim Vice President, Global Biological Policy and Programs in FY2021 and as a board member in FY2022 (ProPublica). Ernest J. Moniz, former Secretary of Energy, is CEO and Co-Chair ($472,562, FY2024) (ProPublica). Others: Joan Rohlfing (President and COO), Hayley Severance (Deputy VP), Jessica Bell (Senior Director), Lynn Rusten (VP, Global Nuclear Policy Program, $476,544) (ProPublica); Piers Millett, founding Executive Director of IBBIS; R. Alta Charo, former NTI David A. Hamburg Distinguished Fellow (NTI IBBIS).

Part / profile	Figure classification	Source text with inline citation
Part VII: 9. Rockefeller Foundation Pandemic Prevention Institute (PPI)	Reported dollar figure(s) as transcribed	2. Active dates and lifecycle. Rick Bright hired 8 March 2021 as SVP Pandemic Prevention and Response (Rockefeller Foundation); PPI announced with up to US$150 million on 25 October 2021 (Rockefeller Foundation); Bright departed and PPI was folded back into the foundation in September 2022 (*Science*, secondary). Lifespan: roughly 18 months from launch to dissolution.
Part VII: 9. Rockefeller Foundation Pandemic Prevention Institute (PPI)	Reported dollar figure(s) as transcribed	4. Total funding. Up to US$150 million committed by the Rockefeller Foundation (Rockefeller Foundation); $25 million invested as of October 2021 (PPI brochure). Related Rockefeller commitments: $15 million to the Pandemic Fund (KFF Pandemic Fund) and US$5 million to the WHO Hub for Pandemic and Epidemic Intelligence announced 22 May 2023 (WHO Pandemic Hub).
Part VII: 9. Rockefeller Foundation Pandemic Prevention Institute (PPI)	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. A $150 million commitment produced an institute that lasted about 18 months; its own leader publicly attributed the early death to "cycles of panic and neglect" (*Science*, secondary). Structural anomaly: an entity explicitly designed to be a global early-warning system claimed G7 recognition and a seat in a WHO surveillance-network working group while holding no governmental mandate, no treaty basis, and no public accountability mechanism (PPI brochure).
Part VII: 10. Gates Foundation–Funded Biosurveillance with Verified US Federal Co-Funding	Reported dollar figure(s) as transcribed	4. Total funding. US$100 million total over four years. The African Union press release provides no separate dollar amount for any individual partner, including CDC and Gates, and does not state how much US federal money is inside the $100 million (African Union). KFF independently characterizes the initiative as a $100 million, four-year partnership among Gates, US CDC, and others, also without individual amounts (KFF Africa CDC). The Gates Foundation also gave Africa CDC $20 million in 2021 to "fill the most important resource gaps for pandemic response efforts" (KFF Africa CDC).
Part VII: 10. Gates Foundation–Funded Biosurveillance with Verified US Federal Co-Funding	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. Disclosure anomaly: a $100 million, four-year, continent-wide pathogen genomic surveillance program discloses no partner-level contribution amounts whatsoever, including the federal share — neither the African Union release nor KFF's independent profile can state how much US taxpayer money is inside it (African Union; KFF Africa CDC). Governance anomaly: two commercial sequencing vendors and one hyperscale cloud provider supply the platform in kind, creating durable technical lock-in without a disclosed procurement competition (African Union). Boundary finding: for the Global Health Security Index, Gates funding is documented but no US government funding or contract is stated; anyone asserting federal co-funding of the GHS Index would be asserting something not supported by any source opened here (NTI GHS Index).

Part / profile	Figure classification	Source text with inline citation
Part VII: 11. US Government–Funded Biosurveillance in Africa via Africa CDC and CDC Africa Programs (Post-2020)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies; award IDs. US CDC is the primary US funder, with additional funding from the Defense Threat Reduction Agency, primarily via DOD (KFF Africa CDC). Documented instruments: a US CDC–Africa CDC Memorandum of Understanding signed 2015, renewed as an updated Memorandum of Cooperation in March 2022, signed by AU Commission Chairperson Moussa Faki Mahamat and Secretary of State Antony Blinken (KFF Africa CDC; White House fact sheet). Named award: CDC cooperative agreement NU2GGH002493 to the African Field Epidemiology Network (AFENET), awarded September 2023, with obligations grown from $3,250,000 to $14,356,795, work performed in Uganda (HigherGov). Federal Register notice 88 FR (15 March 2023) records a CDC award of approximately $20,000,000 in Year 1 to recipients including ARHB Ethiopia (govinfo).
Part VII: 11. US Government–Funded Biosurveillance in Africa via Africa CDC and CDC Africa Programs (Post-2020)	Reported dollar figure(s) as transcribed	4. Total government funding. KFF records US in-kind support to Africa CDC of approximately $1 million to $3 million annually since 2015 (KFF Africa CDC). In 2018 the US announced an initial $150 million in support to national health institutes in Africa, though KFF notes it is not stated that the full amount went directly to Africa CDC (KFF Africa CDC). The March 2022 White House fact sheet states no dollar amount at all for US funding to Africa CDC (White House). CDC allocated $20 million from the Infectious Disease Rapid Response Reserve Fund for the 2021 DRC and Guinea Ebola outbreaks (CDC archive). Non-US comparators for scale: World Bank $100 million (2022); African Development Bank $27.3 million (2022) covering 37 ADF-eligible member states; France $2.4 million (2022); Gates Foundation $20 million (2021); MasterCard Foundation $1.5 billion (2021); European Union €10 million (2020) (KFF Africa CDC). Pandemic Fund: US$39,996,957.75 approved for HARMONIZE, with US$234,198,132 co-financing and US$68,113,959 Africa CDC co-investment, targeting outcomes by 2029 (Pandemic Fund).

Part / profile	Figure classification	Source text with inline citation
Part VII: 11. US Government–Funded Biosurveillance in Africa via Africa CDC and CDC Africa Programs (Post-2020)	Reported dollar figure(s) as transcribed	12. Controversies, oversight findings, anomalies. Funding-opacity anomaly: the United States has been a founding institutional partner of Africa CDC since 2015, yet the best available public accounting of its direct support is a range — "approximately $1 million to $3 million annually," largely in kind — while a $150 million 2018 announcement for African national health institutes cannot be traced to Africa CDC specifically (KFF Africa CDC). Disparity anomaly: on the same public record, the MasterCard Foundation committed $1.5 billion in 2021 and the World Bank $100 million in 2022 — private and multilateral money exceeding documented direct US contributions by two to three orders of magnitude (KFF Africa CDC). Geopolitical anomaly: the United States and the People's Republic of China signed a 2016 Memorandum of Understanding to jointly support Africa CDC, with China separately having financed and constructed Africa CDC's headquarters facilities — a documented instance of US and Chinese state capacity building inside the same continental disease-surveillance institution (KFF Africa CDC). Award-growth anomaly: cooperative agreement NU2GGH002493 to AFENET grew from $3,250,000 to $14,356,795 — a 4.4-fold increase in obligated value from its September 2023 award (HigherGov). Reporting-gap anomaly: the March 2022 White House fact sheet announcing an expanded US–Africa CDC partnership states no dollar figure of any kind (White House). No GAO or HHS Inspector General report specific to US funding of Africa CDC was located in this session — UNVERIFIED — no primary source located.
Part VII: 12. The 2025–2026 Rupture: WHO Withdrawal, IHR Amendment Rejection, and the America First Global Health Strategy	Reported dollar figure(s) as transcribed	4. Financial magnitude. The US assessed contribution rate to WHO was 22%, the maximum for any member state; assessed contributions ran $109 million–$122 million per year FY2017–FY2024; voluntary contributions ranged from a low of $105 million (FY2020) to a high of $694 million (FY2022); total annual US contributions ranged from $163 million to $816 million. The United States was WHO's largest single donor, supplying 15.6% of WHO revenue in the 2022–2023 biennium (KFF).
Part VII: 12. The 2025–2026 Rupture: WHO Withdrawal, IHR Amendment Rejection, and the America First Global Health Strategy	Reported dollar figure(s) as transcribed	12. Controversies and anomalies. Overhead anomaly: the AFGHS asserts that less than 40% of US global health assistance reaches frontline supplies and workers, that roughly 25% purchases commodities and roughly 15% employs more than 270,000 frontline health workers — leaving about 60% consumed by technical assistance, program management, and overhead (Department of State). This is a US government self-assessment of the same architecture documented in Sections 1–11 and is the most consequential official critique of it located in this session. Sovereignty rationale: the joint HHS–State rejection of the IHR amendments framed them as risking WHO authority over national health decisions; the rejection preserves the pre-2024 IHR (2005) text as the operative US obligation, notwithstanding the WHO withdrawal (HHS; Reuters, secondary). Structural anomaly: the United States authored the JEE, chaired GHSA, seeded the Pandemic Fund with $700 million and pledged up to $667 million more (Treasury JY2481), then exited the organization that administers the evaluation regime those investments were built to serve — while the evaluation machinery, the Pandemic Fund board seat, and the GHSA membership structure all continue to operate.

Part / profile	Figure classification	Source text with inline citation
Part VII: Cross-Cluster Findings	Reported dollar figure(s) as transcribed	2. Private philanthropy sets the measurement standard that governments are scored against. The Global Health Security Index — the instrument that ranked the United States first in the world in October 2019 — is produced by NTI, the Johns Hopkins Center for Health Security, and Economist Impact, funded by Open Philanthropy ($476,859 + $3,556,773 + $6,000,000) and the Gates Foundation ($250,000), with no US government funding documented (NTI; Open Philanthropy; NTI grant announcement).
Part VII: Cross-Cluster Findings	Reported dollar figure(s) as transcribed	3. Surveillance capacity is repeatedly financed as emergency supplemental money, not base appropriations. CDC's GHSA work FY2015–FY2019 came from a single expiring Ebola supplemental (Pub. L. 113-235) (GAO-21-359); PEPFAR's COVID informatics work was financed through the CARES Act, P.L. 116-136 (EID 28(13) 22-0751); the FY2021 spike to $1.6745 billion included $750 million in COVID supplemental for CDC Global Health Protection (KFF).
Part VII: Cross-Cluster Findings	Reported dollar figure(s) as transcribed	4. Foundation-led surveillance ventures have short lifespans and leave no accountable record. The Rockefeller Pandemic Prevention Institute (up to $150 million, announced 25 October 2021) folded within roughly 18 months (Rockefeller Foundation; *Science*, secondary); the Global Virome Project's $1.2 billion program never launched at scale (UC Davis One Health Institute).
Part VIII: 2. BioCat / BioCat 2.0 (Pacific Northwest National Laboratory) — POSITIVE FINDING	Reported dollar figure(s) as transcribed	1. Name and aliases. BioCat, also BioCat 2.0; formally documented as PNNL-22767, "BioCat 2.0: Biosurveillance Model Catalog," a Pacific Northwest National Laboratory technical report of September 2013 (PNNL-22767; mirrored at OSTI). The catalog was hosted at http://BioCat.pnnl.gov (PLOS ONE, Corley et al. 2014). Explicit disambiguation: this is not BioCat GmbH (German life-science reagents distributor, biocat.com), not Biocat (the Catalonia, Spain bioregion cluster, biocat.cat), not BIO-CAT Inc. (Virginia enzyme manufacturer), and not BioCatch (Israeli behavioral-biometrics fraud-detection firm acquired by Visa in a $2.4 billion deal, WSJ). It is also not BIOCOM/BayBio, the California life-sciences trade association. No US-government-connected disease-surveillance company named " Biocat" was located — the only verified US disease-surveillance referent is the PNNL model catalog.
Part VIII: 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines	Reported dollar figure(s) as transcribed	3. Lead and funding agencies with budget line IDs. Appropriation 0400, RDT&E Defense-Wide, Defense-Wide Justification Book Volume 4 of 5, dated June 2025. Program elements and FY2026 requests (dollars in thousands): Basic Research 0601384BP line 9, $36,582; Applied Research 0602384BP line 21, $230,751; Advanced Technology Development 0603384BP line 54, $247,043; Advanced Component Development & Prototypes 0603884BP line 86, $272,940; System Development & Demonstration 0604384BP line 144, $255,630; RDT&E Management Support 0605384BP line 179, $67,263; Operational Systems Development 0607384BP line 227, $79,118; total RDT&E FY2026 $1,189,327K, against FY2024 actuals of $1,304,797K and FY2025 enacted of $1,200,630K (FY2026 CBDP RDT&E Justification Book).

Part / profile	Figure classification	Source text with inline citation
Part VIII: 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines	Reported dollar figure(s) as transcribed	4. Total government funding. FY2025 request: $1,656.7M total — RDT&E $1,230.6M and Procurement $426.0M — apportioned Understand $700.1M (40.5%), Protect $431.1M (26.1%), Mitigate $325.3M (21.4%), Enabling $200.2M (12%) (FY2025 CBDP Procurement Justification Book). FY2026 request: $1.61B, split Understand $723M, Protect $445M, Mitigate $283M, Enabling Investments $160M; RDT&E $1,189.3M and Procurement $421.4M (FY2026 CBDP RDT&E Justification Book).
Part VIII: 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines	Reported dollar figure(s) as transcribed	5. Technology / biosurveillance-specific lines. FY2026 RDT&E highlights include "Enhanced biodefense and pandemic preparedness" $331.5M, " Environmental detection and medical diagnostic capabilities" $239.2M, " Rapid Response System for Developing Medical Countermeasures" $225.1M, "Basic research and threat agent sciences" $103.3M, and — the core biosurveillance analytics line — "Integrated early warning, warning and reporting, decision support, and modeling and simulation" $75.5M, down from $100.6M in the FY2025 request (FY2026 CBDP RDT&E Justification Book; FY2025 CBDP Procurement Justification Book). On the procurement side, P-1 Line 72, "Chemical Biological Situational Awareness," shows FY2023 $145.187M, FY2024 $159.884M, FY2025 $215.038M, and prior-years total $1,148.737M, with sub-items JBTDS MX0001 $9.872M, EMBD SA0003 $21.203M, and CBRN DRS MC0101 $74.140M (FY2025 CBDP Procurement Justification Book). FY2026 procurement highlights include Enhanced Maritime Biological Detectors and Joint Biological Tactical Detection Systems, including the Joint Handheld Biological Identifier, $65.1M (FY2026 CBDP RDT&E Justification Book).
Part VIII: 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines	Reported dollar figure(s) as transcribed	8. Institutional lineage. The FY2026 book states the 2024 Enterprise Strategy "cemented these changes" and that the request "postures the CBDP to execute the Strategy in support of the Department's priorities to rebuild the military, reestablish deterrence, and restore the warrior ethos" (FY2026 CBDP RDT&E Justification Book). Adjacent DTRA lineage: the Cooperative Threat Reduction program shows FY2024 actual $350,999K, FY2025 enacted $296,076K, and FY2026 request $282,830K, while DTRA O&M falls to $841.176M in FY2026, a decrease of $133.0M (CTR OP-5, FY2026).
Part VIII: 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. Trend anomaly: while total CBDP funding is roughly flat, the dedicated biosurveillance analytics line ("integrated early warning, warning and reporting, decision support, and modeling and simulation") fell approximately 25% from $100.6M requested in FY2025 to $75.5M in FY2026, and RDT&E Management Support (0605384BP) fell from $83,238K enacted to $67,263K requested, even as procurement of biological detectors was sustained (FY2025 CBDP Procurement Justification Book; FY2026 CBDP RDT&E Justification Book). A second anomaly: the Small Business Innovative Research element 0605502BP drops from $31,904K in FY2024 actuals to $0 in both FY2025 enacted and FY2026 requested (FY2026 CBDP RDT&E Justification Book).
Part VIII: 10. DHS National Biosurveillance Integration Center (NBIC)	Reported dollar figure(s) as transcribed	3. Lead and funding agencies. DHS. Annual funding as reported by GAO: FY2013 $12.33M; FY2014 $10M; FY2015–FY2017 $10.5M each; FY2018 $8M; FY2019 $7.256M; FY2020 and FY2021 $12.256M each; FY2022 $15.756M; FY2023 $16M (GAO-24-106142).

Part / profile	Figure classification	Source text with inline citation
Part VIII: 10. DHS National Biosurveillance Integration Center (NBIC)	Reported dollar figure(s) as transcribed	4. Total government funding. Summing the GAO-reported annual figures FY2013–FY2023 yields approximately $125.6M over eleven years — a small program relative to its statutory integration mandate (GAO-24-106142).
Part VIII: 10. DHS National Biosurveillance Integration Center (NBIC)	Reported dollar figure(s) as transcribed	12. Controversies / GAO findings / structural anomalies. GAO-24-106142, issued 29 November 2023, is the principal oversight document (GAO-24-106142). The FY2026 restructuring is itself the anomaly of record: all 286 CWMD positions and 263 FTEs and $409.4 million in funding are reassigned, with no funds requested under CWMD's former accounts; BioWatch, Mobile Detection Deployment, and Securing the Cities move to CISA's Infrastructure Security Division; CBRNE research and development moves to the US Coast Guard; Radiation Portal Monitor Support moves to CBP; and CISA absorbs CWMD's $142.9 million Federal Assistance portfolio (Global Biodefense — secondary; primary at DHS CWMD FY2026 CBJ). The net effect is that the statutory biosurveillance integrator (NBIC) is separated from the nation's biodetection program (BioWatch), which moves to a cybersecurity agency.
Part VIII: 11. DoD Global Emerging Infections Surveillance (DoD-GEIS / AFHSC-GEIS / AFHSD GEIS Branch) and the DHA Integrated Biosurveillance Branch	Reported dollar figure(s) as transcribed	3. Lead and funding agencies. Defense Health Agency; funded through the Defense Health Program operation and maintenance appropriation, with a core budget of approximately $11.5M in FY2007 (Russell et al., BMC Public Health 2011).
Part VIII: 13. IARPA Open Source Indicators (OSI) and EMBERS	Reported dollar figure(s) as transcribed	4. Total government funding. "Funded by a $22M contract from IARPA's Open Source Indicators (OSI) program" (Butler presentation). UNVERIFIED — no contract or award number is stated in the source.
Part VIII: 14. USAID STOP Spillover (Strategies to Prevent Spillover)	Reported dollar figure(s) as transcribed	4. Total government funding. $100 million over five years (USAID press release).
Part VIII: 14. USAID STOP Spillover (Strategies to Prevent Spillover)	Reported dollar figure(s) as transcribed	12. Controversies / anomalies. The USAID release states plainly for every oversight category: "No oversight findings stated," "No audit findings stated," "No investigations stated" (USAID press release). The material anomaly is termination: the agency that awarded and supervised the $100M project ceased to exist on 1 July 2025 (CNN — secondary), leaving the disposition of project records and any close-out audit UNVERIFIED — no primary source located.

Personnel revolving-door and cross-appointment record

Person	Documented positions or affiliations	Evidentiary note
James M. Wilson V, MD	Georgetown ISIS/Project Argus principal investigator and director; first Chief of Analytic Operations at NBIC; Veratect CTO/chief scientist; Ascel Bio co-founder; later Proseko Consulting founder/CEO	The Georgetown → NBIC → vendor progression, and Wilson's congressional testimony concerning Veratect support for NBIC, are documented; no IG finding on the transition was located (House hearing record; IARPA Ascel Bio poster).
Dylan George, PhD	DoD; BARDA; In-Q-Tel vice president; Ginkgo/Concentric vice president; CDC Center for Forecasting and Outbreak Analytics director	CDC's own biography documents the two immediately prior private-sector roles; the full pre-CDC government chronology is retained in the Ginkgo profile (CDC biography).
Renee Wegrzyn	DARPA BTO program manager; Ginkgo vice president of business development; inaugural ARPA-H director	The Ginkgo and ARPA-H transitions are reported in the retained cluster with secondary labels where applicable; the row records employment history, not a finding of conflict (STAT).
Nathan D. Wolfe	Founder of Global Viral/Global Viral Forecasting/Metabiota; Baktus executive and director; NIH Pioneer Award recipient; Global Virome Project participant; DARPA Defense Science Research Council membership is secondary-sourced	SEC Form D filings document company positions; the DARPA council membership remains secondary-sourced as flagged (SEC Form D 2015; GVP leadership).
Nita Madhav	Metabiota CEO at asset sale; joined Ginkgo's Concentric team	Corporate acquisition release documents the transition (Ginkgo/PR Newswire).
Dennis Carroll	USAID PIOET/EPT director; Global Virome Project board chair	The EPT and GVP source records document the program and board roles (PREDICT Final Report; GVP leadership).
Jonna A.K. Mazet	UC Davis PREDICT principal; Global Virome Project board member	Both appointments appear in the PREDICT/GVP source record (PREDICT Final Report; GVP leadership).
Peter Daszak	EcoHealth Alliance president; Global Virome Project secretary and treasurer; recipient of HHS debarment notice	The GVP appointment and debarment record are distinct facts and should not be conflated (GVP leadership; HHS Notice of Debarment).

Person	Documented positions or affiliations	Evidentiary note
Tara O'Toole	University of Pittsburgh Center for Biosecurity founding director; Johns Hopkins Center for Health Security affiliation	The institutional transition is documented in the university-center record (Johns Hopkins Center for Health Security).
Andrew C. Weber	Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs; Ginkgo FELIX adviser (secondary source)	The Ginkgo adviser role is explicitly marked secondary in the retained profile (ExecutiveBiz).

Institutional-lineage map

• DTRA lineage: Manhattan Project → Defense Nuclear Agency → Defense Special Weapons Agency → DTRA (1998); within its biological line, BWPP (1998) → BTRP (2006) → CBEP → BTRP (DTRA FY2024 AFR; RAND RR660).

• Argus/NBIC/commercialization lineage: Project Argus (Georgetown; ITIC/DHS-supported) → NBIS/NBIC data ingestion and personnel continuity → Veratect → SPADAC → GeoEye Analytics; a separate Wilson branch is Ascel Bio → IARPA Mercury proposal. The claimed ARGUS → AGIS/Apollo succession remains UNVERIFIED — no primary source located (DHS OIG-07-61; GeoEye SEC 8-K).

• Global-viral/commercialization lineage: Global Viral Forecasting, Inc. → Epintel, Inc. → Metabiota, Inc. → Baktus holding company → Ginkgo/Concentric acquisition of epidemiological data infrastructure; the nonprofit Global Viral is a separate founder-linked entity (SEC Form D 2015; Ginkgo Form 10-Q).

• USAID pandemic-surveillance lineage: USAID H5N1 work → EPT → PREDICT/PREDICT-2 → STOP Spillover and DEEP VZN; Global Virome Project is a successor initiative led by personnel from the PREDICT/EPT ecosystem (USAID EPT Fact Sheet; GVP leadership).

• Civilian data-platform lineage: BioSense → BioSense 2.0 → NSSP/BioSense Platform with ESSENCE; separately HHS Protect → ASPR Engage/Tiberius/DCIPHER → CDC Common Operating Picture (PMC5676506; FedScoop).

• Policy lineage: DURC policies → 2014–2017 GOF pause → P3CO → 2024 DURC/PEPP policy → EO 14292; CRS identifies unresolved policy-status questions after the 2025 change (CRS R47114).

Documented overlap and conflict-of-interest questions

• CIA-linked investment and government contracting at Metabiota. In-Q-Tel's announced strategic relationship with Metabiota is secondary-sourced and the investment amount was not located; Metabiota's USAID, DTRA, Navy, NIH, CDC, DHS, and State awards are separately documented. The audit locates no primary-source conflict-of-interest review governing that overlap (PRWeb; Ginkgo Form 10-Q).

• Public-health contracting to firms with national-security portfolios. Ginkgo's CDC traveler-surveillance awards coexist with DARPA, IARPA, Army, Navy, and NIH awards. This is a documented corporate portfolio; it is not evidence that the CDC program is intelligence-directed (CDC traveler program).

- DTRA and DHS funding to nominally civilian or nonprofit/FFRDC contractors. Metabiota, Battelle/BNBI, MRIGlobal, and universities appear as public-health, research, or service entities while receiving DTRA/DHS work. Battelle's BNBI operates DHS's NBACC while Battelle holds DTRA work and has funded Johns Hopkins CHS, a policy-analysis center (DHS Sponsoring Agreement; 2018 CHS Annual Report).
- Officials and recipients in adjacent roles. The Wilson, George, Wegrzyn, Madhav, and Wolfe examples in the table document movement among government, academic, investor, and contractor roles. Such transitions raise governance and disclosure questions but do not establish individual misconduct without additional evidence.
- P3CO/NSABB structural overlap. The record identifies ex officio representation from NIAID, HHS/ASPR, CDC, FDA, DoD, DHS, FBI, and State on NSABB, while GAO found P3CO-review composition insufficiently transparent (NSABB 2016 Roster; GAO-23-105455).

Consolidated anomalies and oversight record

- Cost and procurement: SIGAR questioned 66% of audited CH2M Hill CBEP Afghanistan costs, including subcontract-cost and sole-source-justification deficiencies (SIGAR 21-08-FA).
- Budget movements: BTRP's FY2025 decrease was identified as "Program decrease – Gabon"; CBDP's dedicated analytics line fell from $100.6 million to $75.5 million in the FY2026 request (CTR OP-5 FY2026; FY2026 CBDP RDT&E book).
- Transparency: P3CO group membership beyond the chair remains unpublished, and a former project-information website is no longer active (GAO-23-105455; CRS R47114).
- Integration performance: GAO repeatedly found NBIC resource, partner-participation, and performance-measure shortcomings; the large Biofeeds intake does not resolve the cited governance and outcome issues (GAO-15-793; GAO-24-106142).
- Biodetection: BioWatch's 149 actionable results produced no confirmed attack, BioWatch Gen-3 was cancelled, and BD21 was paused/treated as a prior effort (GAO-16-99; GAO-21-292).
- Award-data discrepancies: UC Davis's PREDICT-2 total differs from the USAspending figure; SEC Form D financing figures differ from the secondary Forge dataset; and Ukraine-source records differ on mobile-laboratory count. The manuscript retains all values rather than choosing one.
- Vendor and vehicle anomalies: the Texas A&M CIADM ordering period was shortened by 13 years with 13% of its ceiling used; the NBACC re-award was described as a sole-source intent; and the early Ginkgo airport-genomics award had one offer (HigherGov CIADM; Global Biodefense; USAspending.gov).
- Commercialization after public support: Metabiota's data assets entered Ginkgo through an $11.1 million asset acquisition after documented federal awards and subawards; the record does not show that the acquisition price represents value of all prior public funding (Ginkgo Form 10-Q).
- FFRDC governance: Battelle's BNBI operates NBACC under a separate LLC/board structure while Battelle itself undertakes extensive other work; the source documents identify the structure but do not resolve every firewall question (DHS Sponsoring Agreement).

Part X: Register of Unverified and Negative Findings

This register reproduces the clusters' negative-evidence discipline. Each item reports the source session's result, not an assertion that no record exists anywhere. Duplicate negative statements are retained when they attach to different programs or relationships.

Part I: DoD Cooperative Threat Reduction / DTRA Biological Threat Reduction Network

- 1. DoD Cooperative Threat Reduction (CTR) Program / Nunn-Lugar: 10. Relationship to the Intelligence Community. DTRA's official 1998-2008 history documents a Chemical and Biological Intelligence Support Team (CBIST) and exploitation task forces operating in Iraq (DTRA history 1998-2008). CRS's March 2022 Ukraine insight cites Director of National Intelligence Avril Haines on the biolab disinformation question (CRS IN11886, hosted by DTRA). No verified link found in the documents fetched here between the CTR program office and CIA, ODNI, NIC, NCMI, or In-Q-Tel as funding or tasking authorities.

- 2. DTRA Biological Threat Reduction Program (BTRP): 10. Relationship to the IC. No verified link found between BTRP and CIA, ODNI, NIC, NCMI, or In-Q-Tel in the primary documents fetched for this cluster. DTRA's public position is that "DTRA does not own any bio labs in Ukraine" and that "accusations of military biological activity or human experimentation are demonstrably false" [SECONDARY, quoting a DTRA fact sheet] (Washington Times).

- 3. Cooperative Biological Engagement Program (CBEP): 10. Relationship to the IC. No verified link found.

- 4. Ukraine Laboratory Network (Kyiv, Odesa, Lviv, Vinnytsia, Kharkiv): - Kharkiv — a Kharkiv facility is named in the audit scope of this cluster, but no primary-source fact sheet for a Kharkiv BTRP laboratory was located during this session. UNVERIFIED — no primary source located.

- 5. Georgia — Richard G. Lugar Center for Public Health Research (Lugar Lab, Tbilisi): 10. Relationship to the IC. De facto South Ossetian authorities accused the U.S. Defense Intelligence Agency and Georgian security services of deliberately contaminating South Ossetian residents with COVID-19 — an allegation reported as a Russian-backed disinformation claim, not as an established fact [SECONDARY] (Jamestown Foundation). No verified link found between the Lugar Center and any U.S. intelligence agency.

- 5. Georgia — Richard G. Lugar Center for Public Health Research (Lugar Lab, Tbilisi): 12. Controversies. Russian authorities repeatedly alleged from 2017 that the center was engaged in biological weapons development for the United States; the U.S. Department of State called the allegations "groundless" and reaffirmed that all U.S. activities were consistent with the Biological Weapons Convention; biological-weapons expert Filippa Lentzos called them "unfounded" and "part of a disinformation campaign," and Swedish biodefense specialists Roger Roffey and Anna-Karin Tunemalm called them "a Russian propaganda tool" (Lugar Research Center, Wikipedia). Russian Foreign Ministry spokesperson Maria Zakharova made allegations on 17 April 2020; the Russian defense and foreign ministries backed claims by Igor Giorgadze; a routine UN-sponsored inspection visit brought 22 experts from 17 countries; Georgian and Chinese officials issued a joint statement defending the center's activities on 2 May; the Georgian government has invited Russian specialists to inspect and in 2018 allowed Russian media to film and interview personnel [SECONDARY] (Jamestown Foundation). The Giorgadze "73 deaths" allegation is a

Russian-origin claim that this audit could not verify against any primary source. UNVERIFIED — no primary source located.

- 6. Kazakhstan — Central Reference Laboratory (CRL), Almaty: 3. Lead and funding agencies. DTRA / Nunn-Lugar CTR (VOA fact-check). No contract number for the CRL construction was located in the sources fetched. UNVERIFIED — no primary contract record located.
- 6. Kazakhstan — Central Reference Laboratory (CRL), Almaty: 10. Relationship to the IC. No verified link found.
- 7. Uzbekistan — DTRA BTRP Phase 1 and Phase 2: 4. Total government funding. No dollar amount, contract number, award number or task-order number is stated in Bechtel's announcement (Bechtel press release). UNVERIFIED — no primary funding figure located.
- 8. Armenia — U.S.-Built Biological Laboratories: 3-4. Lead agencies and funding. DTRA/DoD; CRS lists Armenia among countries with BTR-upgraded "Secured Labs" (39 across Armenia, Georgia, Kazakhstan and Ukraine) (CRS IN11886). No dollar figure for Armenia was located. UNVERIFIED — no primary funding figure located.
- 8. Armenia — U.S.-Built Biological Laboratories: 8-11. Lineage, products, IC and interagency links: no verified link found in the fetched sources.
- 9. Azerbaijan — Central Reference Laboratory and the Silk Road Network: 2-4. Dates, agencies, funding. Azerbaijan is an active DTRA CTR partner (DTRA CTR page); CRS states BTR built Central Reference Laboratories in Azerbaijan, Ukraine and Kazakhstan (CRS IN11886). No dollar figure, contract number or construction date for the Azerbaijan CRL was located during this session. UNVERIFIED — no primary source located. The U.S. Embassy Baku BTRP page returned an HTTP client error when fetched and could not be read.
- 9. Azerbaijan — Central Reference Laboratory and the Silk Road Network: 8-13. No further verified detail located. No verified link found to the IC or to HHS/NIH for the Azerbaijan facility.
- 11. DTRA Biosurveillance in Southeast Asia: 4. Total government funding. No dollar figures are stated in DTRA's public account of the Southeast Asia program. UNVERIFIED — no primary funding figure located.
- 12. DTRA Biosurveillance Ecosystem (BSVE): 4. Funding. Not stated. UNVERIFIED — no primary funding figure located.
- 16. Metabiota, Inc. (and the Ginkgo Bioworks Transfer): 10. Relationship to the IC. Wolfe's membership on DARPA's Defense Science Research Council is the only documented defense-advisory tie (Nathan Wolfe, Wikipedia). No verified link found to CIA, ODNI, NIC, NCMI or In-Q-Tel.
- 18. U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID): 4. Funding. Not stated in the sources fetched. UNVERIFIED — no primary budget figure located.
- 19. Defense Threat Reduction Agency (DTRA) — the parent agency: 10. Relationship to the Intelligence Community. No document fetched in this session establishes a formal DTRA-IC reporting relationship for BTRP. No verified link found. The only IC-adjacent reference located is the listing of CIA among USAMRIID's historical collaborators (tertiary source; see §18).
- 20. EIDSS and PACS — the DTRA-owned surveillance and pathogen-inventory software stack: 4. Total government funding. Not stated on the solicitation page fetched. UNVERIFIED — no primary dollar figure located for EIDSS/PACS lifetime cost.
- 20. EIDSS and PACS — the DTRA-owned surveillance and pathogen-inventory software stack: 10. Relationship to the Intelligence Community. No verified link found. No fetched document connects EIDSS or PACS data flows to any IC element.

- 20. EIDSS and PACS — the DTRA-owned surveillance and pathogen-inventory software stack: 12. Controversies and anomalies. The structural anomaly here is documentary, not alleged: a U.S. Department of Defense agency funds, owns and sustains the national-level disease reporting software and the pathogen inventory ledger of sovereign foreign health ministries — and the ledger system (PACS) is expressly designed as a closed network for "accounting and control of biological agent stocks" (HDTRA120R0015). No fetched document states who holds the resulting data or under what retention or access terms. UNVERIFIED — no primary data-governance document located.
- 20. EIDSS and PACS — the DTRA-owned surveillance and pathogen-inventory software stack: 13. Key personnel. Not named in the fetched documents. UNVERIFIED — no primary source located.
- 21. Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND): 4. Total government funding. Not stated in the sources fetched. UNVERIFIED — no primary appropriation figure located.
- 21. Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND): 10. Relationship to the Intelligence Community. No verified link found in the documents fetched.
- 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics: 9. Products and companies. The four antigen-test vendors are unnamed in the source. UNVERIFIED — vendor identities not located in a primary source this session.
- 22. Defense Logistics Agency (DLA) — biodefense and public-health logistics: 10. Relationship to the Intelligence Community. No verified link found.
- 23. Global Emerging Infections Surveillance program (GEIS): 4. Total government funding. Not quantified in the article; GEIS funding is stated to have "grown in line with US government funding for surveillance of emerging infectious disease threats." UNVERIFIED — no primary dollar figure located.
- 23. Global Emerging Infections Surveillance program (GEIS): 9. Products and spinoffs. None identified in the fetched sources. UNVERIFIED.
- 23. Global Emerging Infections Surveillance program (GEIS): 10. Relationship to the Intelligence Community. No verified link found. GEIS is described purely as a force-health-protection surveillance coordinator (CDC EID 30(14)).
- 24. "GOHIS" (Global Outbreak / Health Information System) — NOT VERIFIED: 2-13. Findings. UNVERIFIED — no primary source located. Four separate search sweeps and six batched page-fetch rounds conducted in this session produced no DoD, DTRA, DHA, or JPEO-CBRND program, contract, solicitation, budget line, or publication bearing the name "GOHIS" or the expansion "Global Outbreak Health Information System." The DTRA-published Active Contract List (September 2022) contains no such program (DTRA Active Contract List), nor does the FY2026 CTR budget justification (CTR OP-5, FY2026).
- 25. Supporting contractor base — CTRIC/BTRIC prime and task-order holders: 10. Relationship to the Intelligence Community. No verified link found between any CTRIC/BTRIC vehicle and an IC element in the documents fetched.
- Audit Notes and Verification Gaps: - "GOHIS" as a DoD/DTRA program — UNVERIFIED — no primary source located (§24).
- Audit Notes and Verification Gaps: - Total lifetime cost of EIDSS/PACS — UNVERIFIED — no primary dollar figure located (§20).
- Audit Notes and Verification Gaps: - Data governance, retention, and U.S. access terms for EIDSS/PACS data held in partner nations — UNVERIFIED — no primary document located (§20).

• Audit Notes and Verification Gaps: - Identities of the four DLA antigen-test vendors and the associated contract numbers — UNVERIFIED (§22).

• Audit Notes and Verification Gaps: - USAMRIID annual budget — UNVERIFIED — no primary budget figure located (§18).

• Audit Notes and Verification Gaps: - JPEO-CBRND appropriation totals — UNVERIFIED (§21).

• Audit Notes and Verification Gaps: - Any formal Intelligence Community relationship to CTR, BTRP, CBEP, DTRA, JPEO-CBRND, DLA biodefense work, EIDSS/PACS, GEIS, or the CTRIC contractor pool — No verified link found. The single IC-adjacent data point in this cluster is the listing of the CIA among USAMRIID's historical collaborating institutions, sourced to a tertiary encyclopedia entry and flagged as requiring re-verification (§18).

Part II: USAID Emerging Pandemic Threats, PREDICT, EcoHealth Alliance, and Metabiota

• Cluster summary / introductory material: Standards applied: the shared sourcing standard — primary sources prioritized; every factual claim carries an inline link to a source read during this session; secondary sources explicitly flagged; unverifiable claims recorded as "UNVERIFIED — no primary source located."

• Methodology and Sourcing Note: Where a claim circulates widely in secondary or partisan media but no primary document could be located this session, it is labeled UNVERIFIED rather than repeated. A dedicated register of such claims appears near the end of this report.

• Cluster Summary: Two structural anomalies deserve the reader's attention up front. First, the same nine individuals recur across the prime recipient, the largest subrecipient, the for-profit subrecipient, and the successor initiative: Dennis Carroll (USAID EPT architect) became Chair of the Global Virome Project, with Peter Daszak (EcoHealth) as Secretary and Treasurer, Jonna Mazet (UC Davis PREDICT PI) as a board member, and Edward Rubin — Chief Scientific Officer of Metabiota — also on the board (Global Virome Project leadership). Second, the parent-agent research premise of a "Metabiota SPAC merger with Cerberus Telesystems" is not supported by any primary record: an SEC EDGAR full-text search executed this session for the exact phrase "Cerberus Telesystems" returned zero results across the entire filing corpus, while the same search for "Baktus" returned 26 hits establishing the actual corporate structure. That claim is recorded below as UNVERIFIED.

• USAID Emerging Pandemic Threats (EPT) Program — Phase 1: 4. Total government funding. EPT-1 total: UNVERIFIED — no primary source located for a consolidated Phase 1 obligation figure. The Wildlife Conservation Society announcement of PREDICT stated "incremental funding of up to $75 million over 5 years" for PREDICT alone (WCS, 23 Oct. 2009). EPT-2 was a $360 million five-year program (EPT-2 Evaluation).

• USAID Emerging Pandemic Threats (EPT) Program — Phase 1: 10. Intelligence Community relationship. No explicit evidence located this session of CIA, ODNI, NIC, NSC or NCMI participation in the EPT program itself. No verified link found at the program level. However, one EPT implementing partner — Metabiota, Inc., an implementing partner of both PREDICT and PREVENT (USAID Fact Sheet) — separately entered a strategic agreement with In-Q-Tel, Inc., the CIA-linked strategic investor, in August 2017 (documented under Metabiota below).

• USAID Emerging Pandemic Threats (EPT) Program — Phase 1: 11. HHS/NIH and DoD relationship. HHS relationship is explicit and documented: CDC provided technical assistance and seconded two officers into USAID to manage EPT projects, and CDC ran Field Epidemiology Training Programs under the EPT umbrella (USAID Fact

Sheet). DoD relationship at the EPT program level: no verified link found. DTRA relationships exist at the implementer level — EcoHealth Alliance and Metabiota separately held DTRA contracts and grants (documented in their respective sections).

• PREDICT (Phase 1, 2009–2014): 4. Total government funding. WCS's 2009 announcement described "incremental funding of up to $75 million over 5 years" (WCS). Across both phases PREDICT received more than $200 million (Science). Actual PREDICT-1 obligations: UNVERIFIED — no primary source located.

• PREDICT (Phase 1, 2009–2014): 10. Intelligence Community relationship. No verified link found between PREDICT-1 as a program and any IC element. Implementing partner Global Viral Forecasting, Inc./Metabiota's separate In-Q-Tel relationship is documented under Metabiota below.

• PREDICT (Phase 1, 2009–2014): 11. HHS/NIH and DoD relationship. HHS: CDC provided technical assistance to EPT projects including PREDICT and seconded officers into USAID (USAID Fact Sheet). DoD: no verified link found at the PREDICT-1 program level.

• PREDICT-2 (2014–2020): 10. Intelligence Community relationship. No verified link found between PREDICT-2 and any IC element. Note for the record that Metabiota, a $30.9 million PREDICT-2 subrecipient, signed a strategic agreement with In-Q-Tel in August 2017 — mid-performance on this award (PRWeb — SECONDARY). No document located this session establishes IC access to PREDICT-2 data.

• PREDICT-2 (2014–2020): 11. HHS/NIH and DoD relationship. HHS/CDC technical assistance continued under EPT-2 (EPT-2 Evaluation). The most significant documented HHS-adjacent finding is GAO's: two of seven subawards to Chinese entities were second-tier subawards funded through a USAID cooperative agreement, provided by first-tier subrecipient EcoHealth Alliance (GAO-23-106119) — i.e., the USAID/UC Davis chain, not only NIH. DoD: no verified link found at the program level.

• RESPOND (EPT Project): 3. Lead and funding agencies; award IDs. Funder: USAID. Implementing partners: Development Alternatives Inc. (DAI), Tufts University, University of Minnesota, Ecology and Environment, and Training Resources Group (USAID Fact Sheet). Specific RESPOND award identifier: UNVERIFIED — no primary source located (no USAspending record retrievable for the legacy award this session).

• RESPOND (EPT Project): 4. Total government funding. UNVERIFIED — no primary source located.

• RESPOND (EPT Project): 9. Products, companies, spinoffs. None identified. No verified link found.

• RESPOND (EPT Project): 10. Intelligence Community relationship. No verified link found.

• RESPOND (EPT Project): 11. HHS/NIH and DoD relationship. CDC technical assistance across EPT projects, including in-service Field Epidemiology Training Programs (USAID Fact Sheet). DoD: no verified link found.

• RESPOND (EPT Project): 13. Key personnel and cross-program appointments. Not published in the sources located this session. UNVERIFIED — no primary source located for named RESPOND leadership.

• IDENTIFY (EPT Project): 3. Lead and funding agencies; award IDs. Funder: USAID. Implementing partners are three multilateral intergovernmental organizations: the Food and Agriculture Organization (FAO) of the United Nations, the World Health Organization (WHO), and the World Organization for Animal Health (OIE) (USAID Fact Sheet). Award identifiers: UNVERIFIED — no primary source located.

• IDENTIFY (EPT Project): 4. Total government funding. UNVERIFIED — no primary source located. This is a notable transparency gap: IDENTIFY channeled U.S. taxpayer funds to three intergovernmental bodies with no retrievable USAspending award record located this session.

• IDENTIFY (EPT Project): 10. Intelligence Community relationship. No verified link found.

• IDENTIFY (EPT Project): 11. HHS/NIH and DoD relationship. CDC provided technical assistance to EPT projects including laboratory capacity strengthening (USAID Fact Sheet). DoD: no verified link found. For the auditor's record, the "lab twinning" and biosafety-management model described here is functionally parallel to DTRA's Cooperative Biological Engagement Program (CBEP), under which EcoHealth Alliance and Metabiota separately held contracts (documented below) — but no document located this session establishes a programmatic link between IDENTIFY and CBEP.

• IDENTIFY (EPT Project): 13. Key personnel and cross-program appointments. UNVERIFIED — no primary source located.

• PREVENT (EPT Project): 3. Lead and funding agencies; award IDs. Funder: USAID. Implementing partners: FHI 360 and Metabiota Inc. (USAID Fact Sheet). Award identifiers: UNVERIFIED — no primary source located.

• PREVENT (EPT Project): 4. Total government funding. UNVERIFIED — no primary source located.

• PREVENT (EPT Project): 10. Intelligence Community relationship. No verified link found at the PREVENT project level. Implementer Metabiota's In-Q-Tel agreement is documented separately below.

• PREVENT (EPT Project): 11. HHS/NIH and DoD relationship. CDC technical assistance across EPT (USAID Fact Sheet). DoD: no verified link found at project level; implementer Metabiota held $18,417,699.34 in DTRA contract HDTRA114C0104 running 10 February 2014 – 15 November 2016, overlapping the EPT period (USAspending).

• USAID STOP Spillover (2020–2025): 10. Intelligence Community relationship. No verified link found.

• USAID STOP Spillover (2020–2025): 11. HHS/NIH and DoD relationship. No verified link found in the sources located this session.

• USAID STOP Spillover (2020–2025): 13. Key personnel and cross-program appointments. Named STOP Spillover leadership: UNVERIFIED — no primary source located this session.

• USAID DEEP VZN (2021–2024): 10. Intelligence Community relationship. No verified link found.

• USAID DEEP VZN (2021–2024): 11. HHS/NIH and DoD relationship. No verified link found. Specifically, the suggested DTRA linkage is UNVERIFIED — no primary source located.

• EcoHealth Alliance, Inc.: 9. Products, companies, spinoffs. No corporate spinoff, SPAC, IPO or acquisition located. No verified link found to any for-profit spinoff. The claimed successor nonprofit Nature.Health.Global is secondary-sourced only (Wikipedia).

• EcoHealth Alliance, Inc.: 10. Intelligence Community relationship. No verified link found. No document located this session establishes CIA, ODNI, NIC, NSC, NCMI or In-Q-Tel funding of, investment in, or tasking of EcoHealth Alliance. Its DHS contracts ("GROUND TRUTH," "REPEL," and 70RSAT-series awards, USAspending API) are homeland-security science and technology awards, not IC awards, on the face of the record.

• Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.): On the alleged SPAC merger. The parent brief's premise of a "SPAC merger with Cerberus Telesystems (~2021)" is UNVERIFIED — no primary source located. An SEC EDGAR full-text search executed this session for the exact phrase "Cerberus Telesystems" returned zero results across the entire EDGAR corpus (https://efts.sec.gov/LATEST/search-index). The same search for "Baktus" returned 26 results, and for "Metabiota" returned 70 results, establishing that the actual 2021 corporate event was the Baktus, Inc. holding-company reorganization (Delaware public benefit corporation; Form D first sale 30 September 2021), not a special-purpose acquisition company merger (Baktus Form D). Metabiota, Inc. never had a public stock ticker — it has no registration statement, no Exchange Act reporting history, and only three Regulation D exempt-offering notices in EDGAR (SEC EDGAR submissions, CIK 0001595047). The only SPAC in this chain is the

acquirer's: Ginkgo Bioworks Holdings, Inc. trades as NYSE: DNA and was formerly named Soaring Eagle Acquisition Corp. (25 Nov. 2020 – 17 Sept. 2021) and before that Spinning Eagle Acquisition Corp. (SEC EDGAR submissions, CIK 0001830214). Separately, a secondary wiki record states that on 30 September 2021 Metabiota was merged with Baktus Acquisition Corporation, a subsidiary of its parent company Baktus (White Rose Intelligence — SECONDARY); the date matches the Baktus Form D first-sale date exactly, which corroborates the reorganization reading.

• Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.): 10. Intelligence Community relationship. Documented, but through a press release rather than a government filing. On 22 August 2017, Munich Re and In-Q-Tel, Inc. (IQT) — the CIA-affiliated strategic investor — announced strategic agreements with Metabiota; the release carries a quote from Eugene Chiu, Partner, Investments at In-Q-Tel, names Metabiota's then-CEO as Bill Rossi, and states Metabiota had offices in San Francisco, Canada, Sierra Leone, Cameroon and the DRC with operations in nearly 20 countries (PRWeb — SECONDARY). Secondary-market data independently lists In-Q-Tel as a Series B investor at $1.84/share on 7 March 2017 (Forge Global — SECONDARY) — five months before the public announcement. No primary government document, In-Q-Tel filing, or SEC filing disclosing the In-Q-Tel investment amount was located this session; the two corroborating sources are both secondary. No ODNI, NIC, NSC or NCMI relationship located: no verified link found.

• Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.): - Simultaneous roles. Metabiota concurrently held USAID public-health subawards ($30.9M under PREDICT-2), DTRA biological-threat-reduction contracts ($18.4M+), Navy research grants ($18.6M), a Department of State grant, a commercial reinsurance analytics business with Munich Re, and CIA-linked venture investment from In-Q-Tel (sources above). No document located this session shows a conflict-of-interest firewall or disclosure regime governing that overlap. UNVERIFIED — no primary source located on any COI review.

• Metabiota, Inc. (formerly Global Viral Forecasting, Inc. / Epintel, Inc.): - Hunter Biden / Rosemont Seneca / Burisma / Ukraine claims. Secondary and partisan sources assert that Rosemont Seneca Technology Partners led Metabiota's financing and that Hunter Biden helped secure funding and a Burisma Holdings "science project" collaboration in Ukraine in April 2014 (Forge Global — SECONDARY; White Rose Intelligence — SECONDARY). The investor-list element is corroborated by two independent secondary datasets (Forge lists RSTP as a Seed and Series A key investor). The Burisma/Ukraine "science project" element traces, in the sources located this session, to a Daily Mail report and to a 27 March 2022 statement by Maria Zakharova of the Russian Ministry of Foreign Affairs — i.e., to tabloid and foreign-state-information sources (White Rose Intelligence — SECONDARY). UNVERIFIED — no primary source located for the Burisma collaboration, and readers should treat the Russian MFA timeline as an information-operations artifact rather than evidence.

• Global Viral / Global Viral Forecasting Institute (nonprofit) and Nathan Wolfe: 3. Lead and funding agencies; award IDs. Private philanthropic funding (Google, Skoll) (Wikipedia — SECONDARY). No federal award record located under this name in USAspending this session — the federal awards run through the for-profit entity. UNVERIFIED — no primary source located for federal funding of the nonprofit.

• Global Viral / Global Viral Forecasting Institute (nonprofit) and Nathan Wolfe: 4. Total government funding. UNVERIFIED — no primary source located.

• Global Viral / Global Viral Forecasting Institute (nonprofit) and Nathan Wolfe: 5–7. Technology, entities, locations. San Francisco, California; the nonprofit is described in secondary sources as the sister organization of Metabiota (White Rose Intelligence — SECONDARY). Technical details: UNVERIFIED — no primary source located.

- Global Viral / Global Viral Forecasting Institute (nonprofit) and Nathan Wolfe: 10. Intelligence Community relationship. No verified link found for the nonprofit itself. Founder Wolfe's DARPA Defense Science Research Council membership is secondary-sourced (Wikipedia — SECONDARY); DARPA is a DoD, not IC, element.
- Global Viral / Global Viral Forecasting Institute (nonprofit) and Nathan Wolfe: 12. Controversies and anomalies. Wikipedia (SECONDARY) states that Nathan Wolfe's name appears 589 times in the January 2026 Department of Justice Epstein files release (Wikipedia: Nathan Wolfe). The underlying DOJ release was not retrieved or examined this session; this claim is UNVERIFIED against a primary source and is reported here solely as a secondary-source assertion requiring independent confirmation against the DOJ production itself. This is a high-priority follow-on item.
- University of California, Davis One Health Institute: 10. Intelligence Community relationship. No verified link found.
- University of California, Davis One Health Institute: 11. HHS/NIH and DoD relationship. CDC technical support via EPT (USAID Fact Sheet). GAO recorded that within the University of California system a Regents of the University of California subaward was terminated and a UC Irvine subaward to the Wuhan Institute of Virology was suspended in May 2020 at NIH's direction over biosafety concerns (GAO-23-106119) — establishing NIH biosafety enforcement action against UC-system subawards. DoD: no verified link found.
- Wildlife Conservation Society (PREDICT partner): 10. Intelligence Community relationship. No verified link found.
- Wildlife Conservation Society (PREDICT partner): 11. HHS/NIH and DoD relationship. No verified link found in the records reviewed for this cluster.
- Smithsonian Institution (PREDICT partner): 10. Intelligence Community relationship. No verified link found.
- Smithsonian Institution (PREDICT partner): 11. HHS/NIH and DoD relationship. No verified link found in the records reviewed for this cluster.
- Columbia, Harvard, Princeton and HealthMap (PREDICT academic partners): 10. Intelligence Community relationship. No verified link found.
- Columbia, Harvard, Princeton and HealthMap (PREDICT academic partners): 11. HHS/NIH and DoD relationship. No verified link found specific to their PREDICT roles.
- Global Virome Project (successor initiative): 10. Intelligence Community relationship. No verified link found. Note, however, that GVP's board included Edward "Eddy" Rubin, Chief Scientific Officer at Metabiota — a company that In-Q-Tel publicly signed a strategic agreement with in 2017 (GVP leadership; Munich Re / In-Q-Tel release). This is an association through a shared individual and organization, not documented IC funding of GVP.
- Global Virome Project (successor initiative): 11. HHS/NIH and DoD relationship. No verified link found.
- Register of Claims That Could Not Be Verified: 1. "Metabiota merged with a SPAC named Cerberus Telesystems (c. 2021)." — UNVERIFIED — no primary source located; affirmatively contradicted by the SEC record. A full-text search of SEC EDGAR returned zero filings containing the phrase "Cerberus Telesystems" (EDGAR full-text search API, https://efts.sec.gov/LATEST/search-index, queried 12 Aug. 2026). No entity by that name appears in the EDGAR company database. What the primary record does show is a September 30, 2021 merger of Metabiota, Inc. into Baktus Acquisition Corporation, a subsidiary of the Delaware holding company Baktus, Inc. — a private reorganization, not a SPAC transaction. Baktus, Inc. filed a Form D on 24 November 2021 reporting $7,500,000 sold to 64 investors, first sale 30 September 2021, with Michael Kertesz as CEO/director and Nathan D. Wolfe as executive officer/director, address 328 Trenton Way, Menlo Park, California (Baktus Form D).

• Register of Claims That Could Not Be Verified: 2. "Metabiota has a publicly traded stock ticker." — UNVERIFIED — no primary source located; contradicted. Metabiota, Inc.'s only SEC filings are three Form D private-placement notices (2013, 2014, 2015) under CIK 0001595047; there is no registration statement, no Exchange Act reporting, and no ticker (SEC EDGAR submissions, CIK 0001595047). Metabiota shares traded only on private secondary marketplaces (Forge Global — SECONDARY). The only exchange-listed ticker in the Metabiota chain is Ginkgo Bioworks Holdings, Inc. (NYSE: DNA), the buyer of Metabiota's data assets, which itself became public through the Soaring Eagle Acquisition Corp. SPAC (SEC EDGAR submissions, CIK 0001830214).

• Register of Claims That Could Not Be Verified: 3. "Hunter Biden / Rosemont Seneca Technology Partners directed Metabiota funding into Ukrainian biolabs." — UNVERIFIED — no primary source located. The verifiable core is narrow: Rosemont Seneca Technology Partners appears as a key investor in Metabiota's Series Seed (12/24/2013, $2.88MM, $0.38/share, $17MM post-money) and as lead investor in the Series A (05/21/2015, $31.2MM, $1.44/share, $89MM post-money) (Forge Global — SECONDARY, private-market data aggregator). Metabiota's own Form D for that 2015 round reports $30,199,999 sold to 24 investors, first sale 23 December 2014, signed by President and COO Robert Mann, with directors Riaz Valani, Nathan D. Wolfe and John DeLoche (Metabiota Form D, 2015) — the Form D does not name investors. Claims of a Burisma-linked "science project in Ukraine" trace to a Russian Ministry of Foreign Affairs statement of 27 March 2022 and to tabloid reporting, as catalogued by a third-party wiki (White Rose Intelligence — SECONDARY). No U.S. government contract, grant, or SEC filing documenting Metabiota work in Ukraine was located.

Part III: HHS, CDC, NIH, NIAID, BARDA, and ASPR Biosurveillance

• Cluster summary / introductory material: Sourcing note: Every dollar figure, contract number, and date below is linked to a source page or API query actually opened during this research session. Contract-level figures marked "USAspending API" come from live queries against https://api.usaspending.gov/api/v2/search/spending_by_award/ run 12 Aug. 2026; those are the federal government's own obligation/potential-value records and are the primary record for award identifiers. Where a widely-repeated claim could not be confirmed in an opened source it is marked UNVERIFIED — no primary source located. Where a suspected institutional link could not be documented it is marked no verified link found.

• National Biosurveillance Integration Center (NBIC) — and its HHS interface: 4. Total government funding. GAO reported NBIC's budget at $10 million to $13 million annually for fiscal years 2012 through 2015 (GAO-15-793). No consolidated lifetime appropriation figure was located: UNVERIFIED — no primary source located for total NBIC funding 2007–2026.

• National Biosurveillance Integration Center (NBIC) — and its HHS interface: 10. Relationship to the Intelligence Community. Documented and explicit: NBIC funded a part-time liaison to U.S. Customs and Border Protection's Office of Intelligence in June 2014 (GAO-15-793). Beyond that CBP-Intelligence liaison, no verified link found in the sources opened this session between NBIC and CIA, ODNI, NIC, NCMI, or In-Q-Tel.

• National Biosurveillance Integration Center (NBIC) — and its HHS interface: 11. Relationship to HHS/NIH/NIAID and DOD components. HHS, CDC, FDA, and ASPR are named NBIS partner agencies; as of July 2015, seven of the 14 federal NBIS partners had or had had memorandums of understanding or interagency agreements with NBIC or DHS's Office of Health Affairs, and only three of 19 partners provided dedicated liaisons (GAO-15-793). NBIC partially funds liaisons from the Department of Veterans Affairs, Department of the Interior, and USDA/APHIS (GAO-15-793). The Department of Veterans Affairs has supplied a liaison since July 2011 to identify ways NBIC can use VA patient healthcare information (GAO-15-793) — i.e., a documented channel from veterans' clinical data into

a DHS center. No verified link found between NBIC and DTRA, DARPA, JPEO-CBRND, CBEP, DLA, or BARDA in the sources opened this session.

• CDC BioSense Platform (BioSense 1.0 / 2.0), ESSENCE, and the National Syndromic Surveillance Program (NSSP): 4. Total government funding. No consolidated lifetime BioSense/NSSP appropriation figure was located in the sources opened this session: UNVERIFIED — no primary source located. The contract-level figures in field 3 are the verified floor. For FY2026 context, CDC's President's Budget requested $4.243 billion for CDC (CDC Budget Overview: FY 2026, stacks.cdc.gov record), with line items including Biothreat Radar: Advanced Molecular Detection $26 million and Biothreat Radar: Travel and Port Health Protection $26 million (FY 2026 CDC Budget Overview factsheet); CDC's FY2026 enacted core public health program level was $9.227 billion, down $21 million from FY2025 (CRS R47207).

• CDC BioSense Platform (BioSense 1.0 / 2.0), ESSENCE, and the National Syndromic Surveillance Program (NSSP): 10. Relationship to the Intelligence Community. No verified link found between BioSense/NSSP and CIA, ODNI, NIC, NCMI, or In-Q-Tel in the sources opened this session.

• CDC BioSense Platform (BioSense 1.0 / 2.0), ESSENCE, and the National Syndromic Surveillance Program (NSSP): 12. Controversies / GAO findings. Congressional criticism in 2007 over false alerts and cost (PMC5676506). GAO-09-100 faulted CDC for the absence of reliable cost and timeline estimates and of outcome-based performance measures for the BioSense redesign, directing recommendations to the Director of the National Center for Public Health Informatics; CDC responded with an evaluation plan (Aug. 2012), timelines (Sept. 2012), and cost estimates (Jan. 2013) (GAO-09-100). The discontinuation of the BioSense web application at end-2016, after roughly $100M-scale multi-year investment, is a documented sunk-cost anomaly (PMC5676506) — note the dollar characterization here is the auditor's inference, not a sourced figure: UNVERIFIED — no primary source located for total BioSense 1.0 spend.

• CDC Global Disease Detection (GDD) Program and Regional Centers: 3. Lead & funding agencies. CDC Center for Global Health / Division of Global Health Protection (PMC5711302). No GDD-specific contract or grant identifiers were located in the sources opened this session: UNVERIFIED — no primary source located for GDD award numbers.

• CDC Global Disease Detection (GDD) Program and Regional Centers: 4. Total government funding. UNVERIFIED — no primary source located for GDD program totals. Congressional-appropriations context that bounds it: CDC total global health funding was $692.8 million in the FY2023 omnibus, with the FY2024 House bill cutting it to $370.7 million (−47%) against a $765.0 million FY2024 request (KFF appropriations tracking table — secondary source, compiled from committee documents).

• CDC Global Disease Detection (GDD) Program and Regional Centers: 6. Entities involved. CDC country offices and host-government ministries of health across the ten regional-center countries; approximately 90 supported countries (PMC5711302). Specific named foreign partner institutions were not enumerated in the sources opened this session: UNVERIFIED — no primary source located.

• CDC Global Disease Detection (GDD) Program and Regional Centers: 7. Locations. Domestic: CDC Atlanta, Georgia. Foreign regional centers: Thailand; Kenya; China (Beijing); Egypt; Guatemala (Central America regional); Kazakhstan (Central Asia regional); India; South Africa; Bangladesh; Georgia (South Caucasus regional) (PMC5711302). Anomaly worth flagging for cross-cluster work: the Kazakhstan/Central Asia (2008) and Georgia/South Caucasus (2012) GDD centers sit in the same two countries as the DoD Cooperative Threat Reduction/CBEP laboratory footprint; this report documents co-location only — no verified link found in the sources opened this session between GDD centers and DTRA/CBEP programs.

- CDC Global Disease Detection (GDD) Program and Regional Centers: 10. Relationship to the Intelligence Community. No verified link found in the sources opened this session.

- CDC Global Disease Detection (GDD) Program and Regional Centers: 11. Relationship to HHS/NIH/NIAID and DOD. GDD is an HHS/CDC program by construction (PMC5711302). No verified link found to NIAID, DTRA, DARPA, JPEO-CBRND, CBEP, or BARDA in the sources opened this session.

- CDC Epidemic Intelligence Service (EIS): 3. Lead & funding agencies. CDC. Statutory basis for the Epidemic Intelligence Service appears at Section 317F of the Public Health Service Act, 42 U.S.C. §247b-7, as listed in the PAHPAIA statutory table (Pub. L. 116-22, PAHPAIA, govinfo/congress.gov PDF). No EIS-specific contract or line-item appropriation figure was located: UNVERIFIED — no primary source located.

- CDC Epidemic Intelligence Service (EIS): 4. Total government funding. UNVERIFIED — no primary source located.

- CDC Epidemic Intelligence Service (EIS): 10. Relationship to the Intelligence Community. Despite the name, no verified link found between EIS and CIA, ODNI, NIC, NCMI, or In-Q-Tel in the sources opened this session.

- CDC Epidemic Intelligence Service (EIS): 11. Relationship to HHS/NIH/NIAID and DOD. EIS is a CDC/HHS program; graduates move into NIH and FDA leadership (STAT News — secondary). No verified link found to DTRA, DARPA, JPEO-CBRND, or BARDA.

- National Wastewater Surveillance System (NWSS): 4. Total government funding. Verified contract obligations/potential values identified above total approximately $93.5 million across ten vendors (USAspending API, 12 Aug. 2026); this is a floor, not the program total. CDC funding for NWSS has run on COVID supplemental appropriations through September 2025, and the Association of Public Health Laboratories has recommended a dedicated appropriation of $130 million per year (APHL, NWSS funding brief, March 2025). A total lifetime NWSS appropriation figure is UNVERIFIED — no primary source located.

- National Wastewater Surveillance System (NWSS): 10. Relationship to the Intelligence Community. No verified link found in the sources opened this session.

- National Wastewater Surveillance System (NWSS): 11. Relationship to HHS/NIH/NIAID and DOD. HHS/CDC program; Biobot also held NIH award 75N95023P00710, $799,971 (USAspending API, 12 Aug. 2026). NIH separately funded a large parallel academic wastewater portfolio under the RADx-rad initiative — e.g., U01DA053941 University of Miami, $2,676,864 (FY2021) with PIs Christopher E. Mason, Stephan C. Schurer, Helena Solo-Gabriele; U01DA053949 Columbia University, $2,448,262 (FY2021), PIs Kartik Chandran, Anne-Catrin Uhlemann; U01DA053893 Missouri Department of Health and Senior Services, $2,000,000 (FY2021), PI Jeff Wenzel; U01DA053903 University of Kentucky, $1,834,258 (FY2021), PI Scott M. Berry; U01DA053976 Arizona State University, $1,494,765 (FY2021), PIs Otakuye Conroy-Ben, Rolf U. Halden, Kerry Hamilton (NIH RePORTER API). No verified link found to DTRA, DARPA, JPEO-CBRND, CBEP, or BARDA.

- Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck: 4. Total government funding. Identified CDC obligations/potential values to Ginkgo for airport genomic surveillance total approximately $145.4 million across 75D30125C20439, 75D30122C14933, 75D30124C19895, 75D30126F00004, and the three Test Surge task orders; identified CDC awards to XpresTest total $23,672,297 (USAspending API, 12 Aug. 2026). XWELL announced a "new contract awarded August 12" valued at "approximately $16 million" to renew support for the program (XWELL, 17 Aug. 2023) — no contract number was stated in that release and it could not be matched to a specific award identifier this session: UNVERIFIED — no primary source located for that award's contract number. XWELL stated in March 2024 that additional funding "will double the CDC's current investment in the TGS program" without stating a dollar figure (XWELL, 12 Mar. 2024). Broader appropriation context: Congress included $1.75 billion for genomics through the American Rescue Plan in 2021 (CDC AMD success story).

• Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck: 10. Relationship to the Intelligence Community. No verified link found between the TGS program itself and CIA, ODNI, NIC, NCMI, or In-Q-Tel. Note separately that the prime contractor, Ginkgo Bioworks, holds an IARPA contract (N6600118C4504, FELIX program, $5,338,550) — an explicit IC relationship at the corporate level, not at the TGS-program level (USAspending API, 12 Aug. 2026).

• Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck: 11. Relationship to HHS/NIH/NIAID and DOD. TGS is CDC/HHS. Prime contractor Ginkgo's other federal awards are heavily DOD/IC: DARPA HR001117C0092 (SD2) $10,446,304; DARPA ReVector HR001120C0073 $5,886,277; DARPA ICE HR001124C0378 $5,206,738; Army/DARPA SUPERB W911NF23C0002 $4,797,261; Navy DRINC BIO N6600123C4509 $1,826,095.16 and N6600112C4018 $3,159,148.73; Army SBIRs W31P4Q14C0035 $1.75M and W31P4Q13C0063 $150,000; HR001112C0010 $500,000; and NIH RADx-ATP 75N92020C00007` $6,574,473.60 (2020) (USAspending API, 12 Aug. 2026). No verified link found** between TGS and JPEO-CBRND, CBEP, DLA, or BARDA.

• Traveler-Based Genomic Surveillance (TGS) Program — CDC / Concentric by Ginkgo / XpresCheck: 12. Controversies / anomalies. Three documented anomalies. (a) Scope creep by contract vehicle: the program moved from SARS-CoV-2 to "more than 30 viral and bacterial targets" (Oct. 2023) and then to metagenomic next-generation sequencing under 75D30126F00004 in 2026 — i.e., untargeted sequencing of samples from international travelers, procured as an option under a COVID-era program (USAspending API, 12 Aug. 2026; XWELL, 12 Mar. 2024). (b) Permanence stated by the contractor, not by statute: Ginkgo's Matt McKnight described the expansion as "a further realization of the goal set out by the CDC and the Federal Government to incorporate the program as part of a permanent biosecurity effort in the United States" (XWELL, 12 Mar. 2024). (c) A new entry-screening mission for the same airport contractor: XpresTest's 75D30126C21193, $18,137,975, is titled "Ebola Entry Screening Services EO 14398" and runs 6 July 2026 – 5 Jan. 2027 (USAspending API, 12 Aug. 2026) — the executive order's text was not opened this session, so its contents are UNVERIFIED — no primary source located.

• Ginkgo Bioworks Holdings, Inc. / Concentric by Ginkgo (contractor entity profile): 8. Institutional lineage. Ginkgo went public via SPAC (Soaring Eagle Acquisition Corp.) — UNVERIFIED — no primary source located this session for the SPAC transaction details. Documented corporate events from the FY2025 10-K: 3 Oct. 2023 — Zymergen, Inc. and certain subsidiaries filed voluntary Chapter 11 petitions and Ginkgo entered the Zymergen asset purchase agreement, deconsolidating Zymergen as of 2 Oct. 2023; 21 Dec. 2023 — Bankruptcy Court approved the sale of substantially all Zymergen assets to Ginkgo affiliates; 18 Jan. 2024 — acquisition completed; 23 Feb. 2024 — Ginkgo's interests in Zymergen entities extinguished; 10 Apr. 2024 — Ginkgo acquired assets from AgBiome, Inc.; 30 Sept. 2024 — Ginkgo sold Altar SAS; June 2024 — initial workforce reductions commenced, with restructuring continuing throughout 2025 (Ginkgo 10-K FY2025).

• Ginkgo Bioworks Holdings, Inc. / Concentric by Ginkgo (contractor entity profile): 10. Relationship to the Intelligence Community. Explicit and documented: Ginkgo holds IARPA contract N6600118C4504 under the FELIX program, $5,338,550 (USAspending API, 12 Aug. 2026). IARPA is a component of ODNI. No In-Q-Tel investment in Ginkgo was located this session: UNVERIFIED — no primary source located.

• Ginkgo Bioworks Holdings, Inc. / Concentric by Ginkgo (contractor entity profile): 11. Relationship to HHS/NIH/NIAID and DOD. CDC (TGS) and NIH (RADx-ATP 75N92020C00007) on the HHS side; DARPA, U.S. Army, and U.S. Navy contracts listed in field 3 on the DOD side (USAspending API, 12 Aug. 2026). No verified link found to DTRA, JPEO-CBRND, CBEP, DLA, or BARDA.

• BARDA — Biomedical Advanced Research and Development Authority: 4. Total government funding. No consolidated BARDA appropriation history was located in an opened primary source: UNVERIFIED — no primary source located for BARDA total appropriations 2007–2026. Verified partial figures: BARDA, together with

JPEO-CBRND, made 290 COVID-19 awards totaling "nearly $48 billion" through the end of FY2021, working with more than 500 private-sector partners and procuring six products under the Project BioShield Special Reserve Fund in 2021 (HHS/medicalcountermeasures.gov, "BARDA15"). ASPR's FY2025 President's Budget request was $3.8 billion in discretionary funding (+$138 million above FY2023), plus a proposed $20 billion in mandatory funding across HHS public health agencies of which $10.5 billion would go to ASPR; the request included +$20 million for BARDA broad-spectrum antimicrobials/CARB, $95 million for medical countermeasure domestic production and supply-chain visibility ($75M onshoring + $20M supply chain), and +$12 million for critical infrastructure protection; ASPR reported $17 billion in industrial base investments during the pandemic (ASPR FY2025 President's Request Highlights).

• BARDA — Biomedical Advanced Research and Development Authority: 10. Relationship to the Intelligence Community. No verified link found in the sources opened this session.

• BARDA — Biomedical Advanced Research and Development Authority: 11. Relationship to HHS/NIH/NIAID and DOD. BARDA is an HHS/ASPR component (CRS IF12683). Explicit DOD linkage: the joint BARDA–JPEO-CBRND COVID-19 award portfolio of 290 awards totaling nearly $48 billion (BARDA15). No verified link found to DTRA, DARPA, CBEP, DLA, or CTR in the sources opened this session.

• BARDA — Biomedical Advanced Research and Development Authority: 13. Key personnel. No BARDA director is named in the pages opened this session: UNVERIFIED — no primary source located.

• BARDA DRIVe (Division of Research, Innovation, and Ventures) and BARDA Ventures: 2. Active dates / lifecycle. DRIVe's solicitation vehicle is the broad agency announcement HHS-18-BARDA-DRIVe-BAA-00018, indicating a 2018 launch (HigherGov listing of the DRIVe BAA — secondary/aggregator source; CDC/HHS primary confirmation of the 2018 founding date was not located this session: UNVERIFIED — no primary source located). The ENACT program's funding opportunity opened 3 Feb. 2020, with Amendment #1 closing 25 Aug. 2021 (BARDA DRIVe, ENACT). Ongoing.

• BARDA DRIVe (Division of Research, Innovation, and Ventures) and BARDA Ventures: 4. Total government funding. For BARDA Ventures, BARDA committed to provide the Global Health Investment Corporation (GHIC) "a minimum of $50 million over five years, with potential for up to $500 million over 10 years," announced 1 June 2021 (GHIC announcement). A DRIVe division-level appropriation figure is UNVERIFIED — no primary source located.

• BARDA DRIVe (Division of Research, Innovation, and Ventures) and BARDA Ventures: 10. Relationship to the Intelligence Community. No verified link found between DRIVe/BARDA Ventures/GHIC and In-Q-Tel, CIA, or ODNI in the sources opened this session — the structural similarity to In-Q-Tel is noted as analysis, not as a documented relationship.

• BARDA DRIVe (Division of Research, Innovation, and Ventures) and BARDA Ventures: 11. Relationship to HHS/NIH/NIAID and DOD. DRIVe is an HHS/BARDA division (BARDA DRIVe, About). No verified link found to NIH/NIAID, DTRA, DARPA, JPEO-CBRND, CBEP, DLA, or Army in the sources opened this session.

• BARDA DRIVe (Division of Research, Innovation, and Ventures) and BARDA Ventures: 13. Key personnel. Sandeep Patel, Ph.D. is widely identified as DRIVe's founding director in conference and video listings surfaced in search, but no primary HHS/BARDA page confirming his title and tenure was opened this session: UNVERIFIED — no primary source located.

• ASPR (Administration for Strategic Preparedness and Response) and PHEMCE: 10. Relationship to the Intelligence Community. No verified link found in the sources opened this session. ASPR is, however, a named NBIS partner agency of the DHS National Biosurveillance Integration Center (GAO-15-793).

• ASPR (Administration for Strategic Preparedness and Response) and PHEMCE: 13. Key personnel. No ASPR official is named in the primary pages opened this session: UNVERIFIED — no primary source located (the July 2022 elevation is commonly attributed to then-ASPR head Dawn O'Connell, but no opened source names her).

• National Biodefense Strategy (2018 and 2022), NSPM-14 and NSM-15: 4. Total government funding. No dollar figures are stated in GAO's assessment of the strategy (GAO-20-273); a biodefense-enterprise budget crosswalk is UNVERIFIED — no primary source located.

• National Biodefense Strategy (2018 and 2022), NSPM-14 and NSM-15: 10. Relationship to the Intelligence Community. No verified link found in the GAO page opened this session; the full 2022 strategy PDF was fetched but no IC-specific provision was extracted this session (2022 Strategy PDF).

• PAHPA reauthorization chain (2006 → 2026): 4. Total government funding. Authorization levels were not extracted from the statute text this session: UNVERIFIED — no primary source located.

• PAHPA reauthorization chain (2006 → 2026): 10. Relationship to the Intelligence Community. No verified link found.

• PAHPA reauthorization chain (2006 → 2026): 11. Relationship to HHS/NIH/NIAID and DOD. PAHPA is the HHS organic statute for preparedness; no verified link found to DOD components in the CRS summary opened this session.

• NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR): 6. Entities involved. CEIRS centers: Center for Research on Influenza Pathogenesis (CRIP) — a domestic and international animal influenza virus surveillance network; the Emory-UGA CEIRS center (swine influenza surveillance); the Johns Hopkins CEIRS center (rapid strain identification); the New York Influenza Center of Excellence (NYICE) (human immune responses); the St. Jude CEIRS center (international wild-bird and domestic-animal influenza surveillance network); plus the DPCC — five research centers and one coordinating center (CEIRR Network archive). CEIRR institutions: Mount Sinai, Penn, St. Jude, Emory, University of Georgia Research Foundation, and Johns Hopkins (NIAID, 14 Apr. 2021; USAspending API, 12 Aug. 2026). Specific foreign partner institutions in the St. Jude and CRIP international surveillance networks were not enumerated in the sources opened this session: UNVERIFIED — no primary source located.

• NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR): 10. Relationship to the Intelligence Community. No verified link found in the sources opened this session.

• NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) → Centers of Excellence for Influenza Research and Response (CEIRR): 11. Relationship to HHS/NIH/NIAID and DOD. CEIRS/CEIRR is an NIAID contract program by construction (NIAID, 14 Apr. 2021). No verified link found to DTRA, DARPA, JPEO-CBRND, CBEP, DLA, Army, or BARDA in the sources opened this session.

• NIH RePORTER-documented biosurveillance grants to universities (portfolio): 10. Relationship to the Intelligence Community. No verified link found in the RePORTER records retrieved this session.

• NIH RePORTER-documented biosurveillance grants to universities (portfolio): 11. Relationship to HHS/NIH/NIAID and DOD. These are HHS awards by definition. No verified link found to DOD components in the records retrieved this session; note that RePORTER's coverage includes CDC (U01IP) and AHRQ (R18HS) awards, not DOD awards (NIH RePORTER API).

Part IV: DHS, the Intelligence Community, and DARPA Biodefense/Biosurveillance

- Cluster summary / introductory material: Audit date: 12 August 2026. Sourcing rule applied: every factual statement below carries an inline link to a document fetched during this research session. Secondary journalism is explicitly labeled [SECONDARY]. Where a widely circulated claim could not be confirmed against a document fetched here, the entry says "UNVERIFIED — no primary source located" or "no verified link found."

- Project Argus (Georgetown University): 4. Total government funding — UNVERIFIED — no primary source located for a consolidated Argus program total. The only dollar-denominated Argus-adjacent figure located is the DHS NBIS Lite prototype contract of approximately $123,000 (Aug. 2005), which was built to ingest Argus data (DHS OIG-07-61).

- Project Argus (Georgetown University): - On "AGIS" and "Apollo": the claim that Argus was succeeded by an "Argus Global Infectious disease Alert System (AGIS)" and by "Apollo," described as a third-generation platform in January 2008, could not be confirmed against any document fetched in this session — targeted searches of the Wilson testimonies (2007 and 2008), the Argus patent, the Argus book chapter, the Eurosurveillance paper, and the 2008 House hearing record returned no occurrence of "Apollo" or "AGIS." Treated here as UNVERIFIED — no primary source located pending production of the underlying document.

- Project Argus (Georgetown University): 11. Relationship to HHS/NIH and DoD — Documented via patent funding statement: TATRC (Army Telemedicine and Advanced Technology Research Center) contracts W81XWH-04-1-0857 and DAMD17-94-V-4015, and NLM (NIH National Library of Medicine) contract N01-LM-3-3306 (US7725565B2). DTRA and USSTRATCOM participated in BIWAC (Wilson, Senate HSGAC). No verified link found between Argus and NIAID, BARDA, or CBEP.

- Project Argus (Georgetown University): 12. Controversies / oversight findings — DHS OIG faulted the NBIS effort that consumed Argus data (see NBIS/NBIC entry). The structural conflict worth flagging: the Argus principal investigator moved from federal program leadership (first Chief of Operations at NBIC) to a vendor position and then testified before Congress recommending that vendor's services to the same federal center (CHRG-110hhrg46259). No IG finding on that revolving door was located — UNVERIFIED — no primary source located.

- National Biosurveillance Integration System / Center (NBIS / NBIC): 9. Products / spinoffs — Thousands of COVID-19 analytic products produced since January 2020; NBIC products used by 11 of 12 surveyed agencies (GAO-24-106142). No commercial spinoff located — no verified link found.

- BioWatch: 10. Relationship to the IC — No verified link found between BioWatch operations and CIA, ODNI, NIC, In-Q-Tel, or NCMI in any document fetched here. Its only intelligence adjacency is indirect: BioWatch output fed NBIC (Wilson, 16 July 2008), which consults with the DNI by statute (6 U.S.C. §195b). Under the FY2026 FEMA transfer, BioWatch moves alongside a CBRN "Threat Intelligence team" (FEMA Advisory).

- BioWatch: 11. Relationship to HHS/NIH and DoD — CDC provides laboratory coordination for BioWatch analysis (CRS RL32152; Garza testimony). No verified link found to NIAID, BARDA, DTRA or JPEO-CBRND in fetched documents.

- Biological Detection for the 21st Century (BD21): 3. Lead and funding agencies (award IDs) — DHS Countering Weapons of Mass Destruction Office (BD21 Privacy Impact Assessment, July 2021; DHS PIA listing). No prime-contract award ID located — UNVERIFIED — no primary source located.

- Biological Detection for the 21st Century (BD21): 4. Total government funding — UNVERIFIED — no primary source located.
- Biological Detection for the 21st Century (BD21): 6. Entities involved — Vendor engagement via a March 18, 2021 virtual industry day hosted by CWMD, materials posted to Beta.sam.gov (Defense Daily) [SECONDARY]. Named performers: none located — UNVERIFIED — no primary source located.
- Biological Detection for the 21st Century (BD21): 9. Products / spinoffs — None located — no verified link found.
- Biological Detection for the 21st Century (BD21): 10. Relationship to the IC — No verified link found.
- Biological Detection for the 21st Century (BD21): 11. Relationship to HHS/NIH and DoD — No verified link found in fetched documents.
- DHS Science and Technology Directorate — Chemical and Biological Defense Division (incl. NBACC and PANTHR): 4. Total government funding — UNVERIFIED — no primary source located for a consolidated CBD or NBACC lifetime total in the documents fetched here; the FY2013 Exhibit 300 is the located budget artifact (DHS).
- DHS Science and Technology Directorate — Chemical and Biological Defense Division (incl. NBACC and PANTHR): 10. Relationship to the IC — Not documented in the DHS materials fetched here — no verified link found to CIA, ODNI, NIC or In-Q-Tel. Law-enforcement rather than intelligence coupling (FBI bioforensics) is what the located sources describe (FAS) [SECONDARY].
- DHS Science and Technology Directorate — Chemical and Biological Defense Division (incl. NBACC and PANTHR): 12. Controversies / oversight findings — None located in the documents fetched this session — UNVERIFIED — no primary source located.
- National Center for Medical Intelligence (NCMI) — formerly AFMIC: 4. Total government funding — UNVERIFIED — no primary source located; NCMI budget lines are not broken out in any document fetched here.
- National Center for Medical Intelligence (NCMI) — formerly AFMIC: 9. Products / spinoffs — Government intelligence products only; no commercialization located — no verified link found.
- National Center for Medical Intelligence (NCMI) — formerly AFMIC: 11. Relationship to HHS/NIH and DoD — NCMI is a DoD organization; DoDI 6420.01 makes it the DoD lead activity for medical intelligence production (DoDI 6420.01). No verified link found to NIAID, BARDA, or DTRA funding flows in fetched documents.
- National Center for Medical Intelligence (NCMI) — formerly AFMIC: 12. Controversies / oversight findings — The central dispute is the reported November 2019 NCMI warning on a Wuhan contagion. ABC News reported on 8 April 2020 that such an analysis existed and was briefed to DIA, the Joint Staff and the White House, appearing in the President's Daily Brief in early January 2020 (ABC News) [SECONDARY]. NCMI's director, Col. R. Shane Day, publicly denied it in the same report: "media reporting about the existence/release of a National Center for Medical Intelligence Coronavirus-related product/assessment in November of 2019 is not correct. No such NCMI product exists" (ABC News) [SECONDARY]. Assessment: the November 2019 NCMI report is UNVERIFIED — no primary source located, and is affirmatively denied on the record by the named NCMI director. CRS surveyed IC pandemic support in CRS IF11537.
- ODNI / National Intelligence Council — Pandemic and Biosecurity Estimative Line: 4. Total government funding — Not applicable / not published — UNVERIFIED — no primary source located.
- ODNI / National Intelligence Council — Pandemic and Biosecurity Estimative Line: 11. Relationship to HHS/NIH and DoD — DIA/NCMI co-production on the 2008 ICA (ODNI ICA). No verified link found to HHS/NIH drafting participation in the documents fetched here.

- DARPA Biological Technologies Office (BTO) — Umbrella: 4. Total government funding — Program-level rather than office-level totals are documented below; office-level lifetime total UNVERIFIED — no primary source located.
- DARPA Biological Technologies Office (BTO) — Umbrella: 10. Relationship to the IC — No verified link found between BTO as an office and CIA/ODNI/In-Q-Tel in documents fetched here. Individual-program IC adjacency is addressed per program.
- DARPA PREEMPT (Preventing Emerging Pathogenic Threats): 10. Relationship to the IC — No verified link found.
- DARPA PREPARE: 2. Active dates / lifecycle — Active DARPA BTO program page; specific start/end dates not stated on the page fetched — UNVERIFIED — no primary source located for exact lifecycle dates.
- DARPA PREPARE: 4. Total government funding — UNVERIFIED — no primary source located.
- DARPA PREPARE: 6. Entities involved — Performer list not located — UNVERIFIED — no primary source located.
- DARPA PREPARE: 9. Products / spinoffs — None located — no verified link found.
- DARPA PREPARE: 10. Relationship to the IC — No verified link found.
- DARPA PREPARE: 11. Relationship to HHS/NIH and DoD — DoD (DARPA) program by definition; no HHS/NIH tie documented in the fetched page — no verified link found.
- DARPA PREPARE: 12. Controversies — None located — UNVERIFIED — no primary source located.
- DARPA PREPARE: 13. Key personnel — Not identified on the fetched page — UNVERIFIED — no primary source located.
- DARPA Pandemic Prevention Platform (P3): 10. Relationship to the IC — No verified link found.
- DARPA Pandemic Prevention Platform (P3): 12. Controversies / oversight findings — None located — UNVERIFIED — no primary source located.
- DARPA Insect Allies: 8. Institutional lineage — A BTO agricultural-biosecurity line distinct from the human-pathogen programs; no predecessor/successor located — UNVERIFIED — no primary source located.
- DARPA Insect Allies: 9. Products / spinoffs — None located — no verified link found.
- DARPA Insect Allies: 10. Relationship to the IC — No verified link found.
- DARPA Insect Allies: 11. Relationship to HHS/NIH and DoD — DoD (DARPA) program; no verified link found to HHS/NIH.
- DEFUSE (rejected 2018 proposal to DARPA): 10. Relationship to the IC — No verified link found between DEFUSE and CIA, ODNI, In-Q-Tel or NCMI. A DoD FOIA reading-room document on SARS-CoV-2 origins and undisclosed U.S. government program analysis exists (DoD FOIA reading room, 22-FRO-0457) — not fetched or read in this session; cited here only as a location for follow-up, not as support for any claim.
- In-Q-Tel (IQT) — CIA Strategic Investment Arm: 4. Total government funding — Not disclosed in the documents fetched here — UNVERIFIED — no primary source located.
- In-Q-Tel (IQT) — CIA Strategic Investment Arm: 10. Relationship to the IC — Definitional: IQT exists to serve the IC (IQT/Claremont release). Important qualification: the 2017 IQT release states IQT and Munich Re "signed strategic agreements with Metabiota"; it does not state an equity amount or an equity stake, and no equity figure was located in any primary document fetched here — the frequently repeated claim that "the CIA bought a stake in Metabiota" for a specified sum is UNVERIFIED — no primary source located. Metabiota's disclosed venture history — a $30 million Series A (May 2015) led by RSTP, $32.8 million total raised, with Capricorn Healthcare, WP Global

Partners, Industry Ventures and Data Collective — does not list In-Q-Tel as an equity investor (TechCrunch) [SECONDARY].

• In-Q-Tel (IQT) — CIA Strategic Investment Arm: 11. Relationship to HHS/NIH and DoD — No verified link found in the IQT documents fetched here. Claims circulating on low-credibility sites that tie In-Q-Tel and Metabiota to DTRA-funded Ukrainian laboratories and to Hunter Biden are not supported by any primary source located in this session; no verified link found. (The recurring vector for these claims, Principia Scientific, is not a reliable source and is cited here only to identify the origin of the claim, not to support it.)

• In-Q-Tel (IQT) — CIA Strategic Investment Arm: 12. Controversies / oversight findings — The structural conflict — a CIA-funded nonprofit taking positions in companies whose products are then sold to intelligence customers — is analyzed academically in "In-Q-Tel: The Central Intelligence Agency as Venture Capitalist" (Northwestern Journal of International Law & Business) [SECONDARY — academic]. No GAO or IG finding on IQT biosecurity investments was located — UNVERIFIED — no primary source located.

• Explicit Negative Findings (claims checked and not substantiated in this session): - "Apollo" as an Argus third-generation platform (Jan. 2008) and "AGIS" as an Argus successor — no occurrence in the Wilson 2007 Senate testimony, the Wilson 2008 House testimony, the 2008 House hearing record, the Georgetown Argus patent, the Argus book chapter, or the Eurosurveillance Argus paper. UNVERIFIED — no primary source located in this session.

• Explicit Negative Findings (claims checked and not substantiated in this session): - A November 2019 NCMI COVID-19 warning product — affirmatively denied on the record by NCMI Director Col. R. Shane Day (ABC News) [SECONDARY]. UNVERIFIED — no primary source located.

• Explicit Negative Findings (claims checked and not substantiated in this session): - In-Q-Tel equity stake in Metabiota (dollar amount or percentage) — not stated in IQT's own release, and IQT does not appear in Metabiota's disclosed cap-table reporting. UNVERIFIED — no primary source located.

• Explicit Negative Findings (claims checked and not substantiated in this session): - In-Q-Tel / Metabiota links to Ukrainian biolaboratories or to Hunter Biden — no verified link found in any primary source.

• Explicit Negative Findings (claims checked and not substantiated in this session): - BioWatch or BD21 tasking, funding, or data-sharing with CIA, ODNI, NIC, In-Q-Tel or NCMI — no verified link found.

• Explicit Negative Findings (claims checked and not substantiated in this session): - DARPA PREPARE performer list, budget, and lifecycle dates — UNVERIFIED — no primary source located.

• Explicit Negative Findings (claims checked and not substantiated in this session): - BD21 total obligated funding and prime contractor identity — UNVERIFIED — no primary source located.

Part V: Commercialization and Biosurveillance Software Platforms

• 1. HealthMap (Boston Children's Hospital / Harvard Medical School): 4. Total government funding — No single consolidated total is published. Documented federal awards identified in this audit exceed $8.3 million across the NIH, CDC, USAID, and IARPA lines enumerated above (Brownstein disclosure; USAspending.gov). A reported Google.org grant of $3 million in October 2008 appears only in a non-primary encyclopedia entry (de.wikipedia.org) — UNVERIFIED — no primary source located for the dollar figure. The Harvard Gazette confirms a Google.org grant and CDC funding without amounts (Harvard Gazette).

• 1. HealthMap (Boston Children's Hospital / Harvard Medical School): 10. Intelligence Community relationship — Documented: an IARPA Mercury/SAFE program subcontract of $225,000 (2016–2017) to Brownstein's group

(congress.gov disclosure). Brownstein's institutional biography lists advisory roles to HHS, DHS, CDC, the Institute of Medicine, WHO, and the White House (Boston Children's). No In-Q-Tel investment or CIA contract for HealthMap was located in any source opened in this session — no verified link found.

- 1. HealthMap (Boston Children's Hospital / Harvard Medical School): 11. HHS / DOD relationships — HHS: extensive, via NIH/NLM and CDC grants listed above. DOD/DTRA: UNVERIFIED — no primary source located. Searches for a DTRA–HealthMap funding line returned only DTRA budget documents with no HealthMap line item (DTRA FY2025 O&M justification). DHS: documented through Epidemico's NBIC contracts (USAspending.gov).

- 2. ProMED-mail (International Society for Infectious Diseases): 10. Intelligence Community relationship — No direct CIA, ODNI, NIC, or In-Q-Tel funding of ProMED was located — no verified link found. Indirect: ProMED reports are ingested as indicators by the intelligence-funded Project Argus (PMC7498883).

- 2. ProMED-mail (International Society for Infectious Diseases): 11. HHS / DOD relationships — CDC has hosted and distributed ProMED-descriptive material (CDC Stacks). USAID funded ISID directly under grant AIDOAAF1600115 (USAspending.gov). No DTRA, DARPA, or BARDA award to ISID was located — no verified link found.

- 3. BlueDot (Canada): 10. Intelligence Community relationship — No verified link found. No In-Q-Tel investment, CIA contract, or US IC relationship for BlueDot appears in any source opened in this session; In-Q-Tel's own published portfolio material reached in this session names other biotechnology holdings but not BlueDot (In-Q-Tel library).

- 3. BlueDot (Canada): 11. HHS / DOD relationships — No verified link found for any US CDC, HHS, DTRA, DARPA, or DoD contract. The zero-result USAspending.gov recipient search is the primary basis for this statement (USAspending.gov).

- 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity): 10. Intelligence Community relationship — Documented. Navy-administered IARPA FELIX contract N6600118C4504, $5,338,550 (USAspending.gov); IARPA Fun GCAT and FELIX software delivery, with Ginkgo partnering with Northrop Grumman and retaining Andrew Weber, former Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, as an adviser on the FELIX prime contract (ExecutiveBiz, secondary). Ginkgo is described as an In-Q-Tel portfolio company in In-Q-Tel's own podcast material featuring founder Jason Kelly with B.Next's Dr. Kevin O'Connell (In-Q-Tel podcast listing) — the investment amount and date were not located in a primary filing this session and are UNVERIFIED — no primary source located. Additionally, CDC CFA director Dylan George served as a vice president at In-Q-Tel before joining Ginkgo (CDC).

- 4. Ginkgo Bioworks / Concentric by Ginkgo (Ginkgo Biosecurity): - GAO: No GAO report naming Ginkgo's traveler program was located in this session — no verified link found for a GAO finding specific to Ginkgo.

- 5. Palantir Technologies — HHS Protect, Tiberius, DCIPHER, and CDC Common Operating Picture: 10. Intelligence Community relationship — Palantir is publicly identified with CIA and other government work (Reuters, secondary). Its origin as an In-Q-Tel portfolio company is widely reported but was not confirmed from a primary filing in this session — UNVERIFIED — no primary source located for the In-Q-Tel investment terms.

- 6. Veratect Corporation (and the Georgetown Project Argus lineage): 4. Total government funding — Veratect: $0 located in federal award databases (USAspending.gov). Project Argus: no dollar totals were stated in the testimony; the funding sources named are TATRC/USAMRMC, ITIC, DHS, and the Intelligence Community (Wilson testimony). Exact Argus obligation figures — UNVERIFIED — no primary source located in this session.

- 6. Veratect Corporation (and the Georgetown Project Argus lineage): 10. Intelligence Community relationship — Explicit and documented for the predecessor program: ITIC funding in summer 2004 and "current funding from the

Intelligence Community" as of the October 2007 testimony (Wilson testimony). Ascel Bio marketed directly to IARPA under the Mercury program (Ascel Bio poster, iarpa.gov). For Veratect itself, no IC contract was located — no verified link found — though the acquirer SPADAC and its successor GeoEye Analytics were geospatial-intelligence contractors (SEC 8-K).

• 7. EIOS — Epidemic Intelligence from Open Sources (WHO): 4. Total government funding — Not published. WHO states EIOS is offered "as a public good, free of charge to its Member States and eligible organizations" and provides no funding amounts (WHO news). US CDC's specific EIOS contribution amount — UNVERIFIED — no primary source located. General US contributions to WHO are published at WHO's contributor page for the USA.

• 7. EIOS — Epidemic Intelligence from Open Sources (WHO): 10. Intelligence Community relationship — No verified link found. No CIA, ODNI, NIC, or In-Q-Tel relationship to EIOS appears in any WHO document opened in this session. The term "intelligence" in EIOS materials refers to epidemic intelligence, an epidemiological discipline (WHO).

• 7. EIOS — Epidemic Intelligence from Open Sources (WHO): 11. HHS / DOD relationships — HHS via US CDC: documented as a funder and technical partner of EIOS expansion in the WHO African Region and as co-organizer of the first Nigerian training (WHO AFRO progress report; WHO AFRO news). DTRA/DARPA/DOD: no verified link found.

• 8. Google Flu Trends (historical): 4. Total government funding — $0 located. No US government contract or grant to Google for GFT was found in this session — no verified link found.

• 8. Google Flu Trends (historical): 10. Intelligence Community relationship — No verified link found.

• 9. Additional Federal Biosurveillance Software and Data Vendors (USAspending keyword: "biosurveillance"): 10. Intelligence Community relationship — None documented for these specific awards — no verified link found.

• Cross-Cutting Findings: 6. Three widely circulated claims remain unverified: a DTRA funding line for HealthMap; In-Q-Tel equity in Metabiota; and In-Q-Tel or US government contracting with BlueDot. Each is marked "UNVERIFIED — no primary source located" or "no verified link found" in the relevant section above.

Part VI: University-Hosted and FFRDC/Nonprofit Biodefense and Biosurveillance Centers

• 1. Johns Hopkins Center for Health Security (CHS): - No consolidated all-years federal total is published by the Center. UNVERIFIED — no primary source located for a cumulative federal figure.

• 1. Johns Hopkins Center for Health Security (CHS): 11. HHS/NIH vs DOD/DTRA relationship. Both, concurrently and by the Center's own listing. HHS side: BARDA, CDC, FDA, ASPR (2017 report) plus the $23.5M CDC CORI award (JHSPH). DOD side: Defense Threat Reduction Agency and the US Naval Postgraduate School in 2017 (2017 report) and "US Department of Defense" as a line item in 2018 (2018 report). No award numbers are published for any of the DOD or DHS lines — UNVERIFIED — no primary source located for the DTRA and NBACC contract identifiers or dollar values.

• 1. Johns Hopkins Center for Health Security (CHS): - Event 201 player roster is not publicly documented by name on CHS's own pages. The exercise page states there were 15 players and roughly 130 invitation-only audience members; the dedicated 15 Oct. 2019 press release announcing the players describes them only as "global business leaders and prominent government and public health leaders" and names no individuals (CHS players release). Widely circulated name lists — including George Gao (China CDC), Avril Haines (former CIA Deputy Director), Mike Ryan (WHO), Hasti Taghi (NBC), Latoya Abbott, Anita Cicero, and Tom Inglesby — appear only in

secondary and non-authoritative sources. UNVERIFIED — no primary source located for the Event 201 named-player roster. This is itself the anomaly: the Center published a full named roster for Clade X (see below) and for Dark Winter, but not for Event 201.

• 2. University of Pittsburgh / UPMC Center for Biosecurity (2003–2017): 3. Lead & funding agencies. Funded by a UPMC endowment plus federal grants and contracts; the Open Philanthropy record confirms that roughly $1.3 million per year of UPMC unrestricted funding was being replaced by philanthropy at the point of the 2017 return to Hopkins (Open Philanthropy). No UPMC-era federal award numbers are published — UNVERIFIED — no primary source located.

• 2. University of Pittsburgh / UPMC Center for Biosecurity (2003–2017): 4. Total government funding. Not published. UNVERIFIED — no primary source located.

• 3. Georgetown University Center for Global Health Science and Security (CGHSS / GHSS) — and Project Argus: 4. Total government funding. Open Philanthropy — $3.5 million over three years, announced 23 Mar. 2017, for biosecurity and pandemic-preparedness policy research including "international best practices for building laboratory capacity of biosurveillance systems" (Georgetown University Medical Center release). No federal total is published for either CGHSS or Argus. UNVERIFIED — no primary source located.

• 4. George Mason University — National Center for Biodefense and Infectious Diseases, Biomedical Research Laboratory, and Schar School Biodefense Program: 4. Total government funding. Construction: $27.7 million NIAID within a $50–50.5 million project (Mason Science; GMU News). Program funding attributable to PI Charles Bailey: 27 funded proposals totaling approximately $51 million, of which $36 million with Bailey as PI or co-PI (Mason Science). No specific NIAID grant number is published on any of these pages — UNVERIFIED — no primary source located for the NIAID construction award identifier.

• 4. George Mason University — National Center for Biodefense and Infectious Diseases, Biomedical Research Laboratory, and Schar School Biodefense Program: 11. HHS/NIH vs DOD relationship. HHS/NIH side: NIAID construction grant and the RBL network (Mason Science). DOD side: DTRA appears as a top employer of Schar School biodefense graduates (Schar School), and per the LA Times (secondary), Mason-affiliated Advanced Biosystems won a $3.59 million DARPA contract in July 2001 and Alibek sought a further $10 million from DTRA, with additional federal research money from the Army Medical Research and Materiel Command, NIH, DOE, and the State Department; AFG Biosolutions won more than $1 million in NIH SBIR grants between 2005 and 2007 (Los Angeles Times). No contract numbers were located for any of these — UNVERIFIED — no primary source located.

• 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers: - CDC five-year cooperative agreement for RaHP VEC under CDC's Strengthening Training and Evaluation Program; no award number is published (CSU News). UNVERIFIED — no primary source located for the RaHP VEC award number.

• 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers: 9. Products / spinoffs. None documented in the fetched sources. No verified link found to a CSU biodefense commercial spinoff.

• 5. Colorado State University — Rocky Mountain Regional Biocontainment Laboratory and Vector-Borne Disease Centers: 10. Relationship to the Intelligence Community. No verified link found. No IC funding, ownership, or personnel connection appears in any source fetched for CSU.

• 6. Texas A&M University System — Center for Innovation in Advanced Development and Manufacturing (CIADM) and National Center for Therapeutics Manufacturing (NCTM): 10. Relationship to the Intelligence Community. No verified link found.

- 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC): 10. Relationship to the Intelligence Community. No verified link found in primary sources fetched for this audit. The only IC-adjacent claim located is the Los Angeles Times statement (secondary) that Ken Alibek and Charles Bailey "worked at Battelle together in 1997," in the same passage that describes Hadron Inc. as having "ties to U.S. intelligence agencies" (Los Angeles Times). That is guilt-by-adjacency, not evidence of a Battelle–IC contractual relationship, and is flagged here as a lead only.

- 7. Battelle Memorial Institute (and Battelle National Biodefense Institute, LLC): 11. HHS/NIH vs DOD/DHS relationship. Battelle's biodefense revenue in the fetched record is overwhelmingly national-security, not HHS: DHS (NBACC FFRDC), DTRA (STEP 2.0, Cooperative Threat Reduction appropriations), and DARPA (SIGMA+) (DHS Sponsoring Agreement; OrangeSlices). No BARDA, NIH, or CDC award to Battelle was located in this audit — UNVERIFIED.

- 8. MRIGlobal (formerly Midwest Research Institute): 4. Total government funding. No consolidated total is published. Documented items sum to at least $201.6 million in ceiling value across the CDC IDIQ ($148M), PFPA ($17.86M), DTRA sample-to-sequence ($14.8M), DTRA West Africa extension ($13.9M), and USDA NBAF IDIQ ($7M). UNVERIFIED — no primary source located for an all-agency cumulative figure.

- 8. MRIGlobal (formerly Midwest Research Institute): 10. Relationship to the Intelligence Community. No verified link found. The closest documented national-security-command relationship is oversight by USSTRATCOM's Center for Combating WMD on the West Africa mission (Global Biodefense) — a combatant command, not an intelligence agency.

- 9. SRI International: 10. Relationship to the Intelligence Community. No verified link found. No IARPA, ODNI, CIA, In-Q-Tel, or NCMI award to SRI was located in this audit. All identified federal sponsorship in the biodefense/AI space is DARPA (HigherGov HR001120C0099; HigherGov HR001124C0437).

- 9. SRI International: 11. HHS/NIH vs DOD relationship. DOD-only on the record examined. Every SRI award located in this cluster is DARPA-funded, drawing on RDT&E, Defense-Wide (097-0400) appropriations (HigherGov HR001120C0099). No NIH, NIAID, CDC, BARDA, or ASPR award to SRI was located — UNVERIFIED.

- 9. SRI International: 13. Key personnel. Peter Madrid, PhD, program director, SRI Biosciences' Center for Chemical Biology, and co-principal investigator leading the chemistry effort on Fold F(x); Nathan Collins, PhD, executive director of SRI Biosciences' Discovery Sciences Section and principal investigator of SRI's Fold F(x) project (CBRNE Central). Robert Balog is listed on LinkedIn as SRI Program Director, January 2012 – March 2017, "Leading the development of SRI's Sentinel Platform for rapid nucleic acid analysis" — secondary, self-reported source; UNVERIFIED.

Part VII: Global Health Security Agenda and International Programs

- Cluster summary / introductory material: Sourcing standard: Every factual claim below carries an inline link to a source opened during this research session. Where a widely repeated claim could not be confirmed in an opened primary source, it is marked UNVERIFIED — no primary source located. Where a suspected institutional connection could not be documented, the text says no verified link found rather than implying one.

- 1. Global Health Security Agenda (GHSA): 9. Products, spinoffs, commercialization. The Agenda's principal exported product is the JEE/NAPHS methodology and the Global Health Security Index, a commercial-analytic

product co-produced with the Economist Intelligence Unit / Economist Impact (NTI). No GHSA-owned commercial entity or spinoff company was located — no verified link found.

- 1. Global Health Security Agenda (GHSA): 10. Intelligence community relationship. E.O. 13747 places the Council under National Security Council staff, chaired by an NSC staff member designated by the Assistant to the President for National Security Affairs in coordination with the Assistant to the President for Homeland Security and Counterterrorism (E.O. 13747); the 2024 Strategy locates the US GHS Coordinator at the NSC Directorate for Global Health Security and Biodefense (2024 GHS Strategy). The FBI is a named Council member and a named contributing implementer of bilateral GHSA activities (E.O. 13747; 2024 GHS Strategy). CIA, ODNI, the National Intelligence Council, NCMI, and In-Q-Tel are not named in any GHSA authority or strategy document opened in this session — no verified link found.

- 1. Global Health Security Agenda (GHSA): 11. Relationship to HHS/NIH/NIAID and DOD/DTRA/DARPA components. HHS, CDC, NIH, FDA, and ASPR are all named participants in the 2024 Strategy's whole-of-government annex, alongside the Defense Threat Reduction Agency and the Development Finance Corporation (2024 GHS Strategy). DOD's contribution to the global health security account is carried in two lines — Biological Threat Reduction Program (BTRP) and Global Emerging Infections Surveillance (GEIS) — totaling $256.6M (FY13) rising to $293.7M (FY23), with BTRP alone at $235.0 million in FY2023 and GEIS at $58.7 million (KFF). No DARPA or JPEO-CBRND role in GHSA appears in the documents opened — no verified link found.

- 1. Global Health Security Agenda (GHSA): 12. Controversies, GAO/IG findings, anomalies. GAO-21-359 (public report April 2021, letter dated 14 April 2021; sensitive version GAO-21-213SU issued 4 February 2021; French translation GAO-21-484), prepared under a mandate from House Report 114-693 with GAO contact David Gootnick, found that CDC's entire GHSA program during FY2015–FY2019 depended on one expiring Ebola supplemental appropriation ($597 million to CDC, expiring at end of FY2019), while USAID's Ebola appropriation was non-expiring (GAO-21-359). Structural anomaly: the Agenda's 2024 target of more than 100 countries with Demonstrated Capacity in at least five technical areas stood at 56 countries as of end-2022 (GHSA 2028 Framework) — roughly half the goal with two years to run. Statutory anomaly: E.O. 13747 §2(b)(i)(7) required an overall five-year GHSA review submitted to the President by September 2019 (E.O. 13747); no public copy of that review was located in this session — UNVERIFIED — no primary source located. Compliance anomaly: the Global Health Security Act required a strategy within 180 days of December 2022 enactment; as of 8 February 2024 CRS recorded that the administration had still not published one "per se" (CRS IF12590) — it appeared April 2024, roughly nine months late (2024 GHS Strategy).

- 2. International Health Regulations (2005): US Implementation, CDC's Role, and the Joint External Evaluation: 3. Lead and funding agencies. The US position was developed by 19 federal agencies led by HHS under NSC/Homeland Security Council oversight; HHS ASPR leads implementation, and the HHS Secretary's Operations Center serves as the US National IHR Focal Point (Stimson). CDC's operational role runs through the Center for Global Health / Division of Global Disease Detection and Emergency Response, now the Global Health Center and Division of Global Health Protection (Stimson; CDC IHR page). No dedicated IHR appropriation line was located — UNVERIFIED — no primary source located.

- 2. International Health Regulations (2005): US Implementation, CDC's Role, and the Joint External Evaluation: 9. Products and commercialization. None identified; the JEE and NAPHS are public methodologies. No verified link found to any commercial product line.

- 2. International Health Regulations (2005): US Implementation, CDC's Role, and the Joint External Evaluation: 10. Intelligence community relationship. The US IHR position was crafted under NSC/HSC oversight (Stimson). No CIA, ODNI, NIC, NCMI, or In-Q-Tel role documented in the sources opened — no verified link found. Note the adjacency:

JEE technical area R.3.1 scores whether "public health and security authorities, such as law enforcement, border control and customs, are linked during a suspect or confirmed biological event"; the United States scored 5 of 5 on it (WHO/WHE/CPI/2017.13).

- 2. International Health Regulations (2005): US Implementation, CDC's Role, and the Joint External Evaluation: 11. HHS/NIH and DOD relationship. ASPR (HHS) leads; the HHS Secretary's Operations Center is the National IHR Focal Point (Stimson). The US JEE team lead and two team members came from the Finnish Defence Forces, i.e., a foreign defense ministry scored US IHR core capacities (WHO/WHE/CPI/2017.13). No DTRA/DARPA/BARDA role in IHR implementation was documented — no verified link found.

- 3. CDC Global Disease Detection Program and Global Disease Detection Operations Center (GDDOC): 3. Lead and funding agencies; award IDs. CDC Center for Global Health funded the program (Rao, PMC5711302). CDC document identifier CS259997B for the GDDOC report (CDC Stacks). No individual contract or grant numbers for GDD center operations were located — UNVERIFIED — no primary source located.

- 3. CDC Global Disease Detection Program and Global Disease Detection Operations Center (GDDOC): 9. Products and commercialization. None identified; diagnostics were implemented in partner-country laboratories, not commercialized by CDC. No verified link found.

- 3. CDC Global Disease Detection Program and Global Disease Detection Operations Center (GDDOC): 10. Intelligence community relationship. No verified link found. No CIA, ODNI, NCMI, or In-Q-Tel involvement in GDD or GDDOC appears in any source opened, notwithstanding GDDOC's event-based surveillance function.

- 3. CDC Global Disease Detection Program and Global Disease Detection Operations Center (GDDOC): 11. HHS/DOD relationship. GDD is an HHS/CDC program under the Center for Global Health (Rao, PMC5711302). No DOD, DTRA, or BARDA funding of GDD centers is documented in the sources opened — no verified link found. KFF lists GDD, ERRB, and FETP as CDC global health security programs within a funding table that separately accounts for DOD's BTRP and GEIS (KFF).

- 4. WHO Global Outbreak Alert and Response Network (GOARN) and US Government Funding: 4. Total government funding. No verified link found — no direct US appropriation line to GOARN was documented in any source opened this session. The GOARN website states no funding information (GOARN); the definitive history article states WHO mobilizes most financial support and does not identify contributions by individual governments or any US amount (PMC4205922). US support to GOARN is documented as institutional participation and in-kind technical deployment through CDC, not as a line-item appropriation (CDC global health partners). Any claim of a specific US dollar contribution to GOARN is UNVERIFIED — no primary source located.

- 4. WHO Global Outbreak Alert and Response Network (GOARN) and US Government Funding: 9. Products and commercialization. None. No verified link found.

- 4. WHO Global Outbreak Alert and Response Network (GOARN) and US Government Funding: 10. Intelligence community relationship. No verified link found.

- 4. WHO Global Outbreak Alert and Response Network (GOARN) and US Government Funding: 11. HHS/DOD relationship. CDC (HHS) is the principal documented US institutional participant (CDC global health partners; PMC4205922). No DOD/DTRA participation documented — no verified link found.

- 5. The Pandemic Fund (World Bank FIF): 9. Products and commercialization. None. No verified link found.

- 5. The Pandemic Fund (World Bank FIF): 10. Intelligence community relationship. No verified link found.

- 5. The Pandemic Fund (World Bank FIF): 11. HHS/DOD relationship. US participation is led by Treasury and funded through USAID and State accounts (Treasury JY2481; KFF). The US Global AIDS Coordinator at State, Amb.

John Nkengasong, co-chaired the Fund's Strategy Committee (KFF Pandemic Fund). No HHS/NIH or DOD/DTRA operational role documented — no verified link found.

• 5. The Pandemic Fund (World Bank FIF): 12. Controversies and anomalies. (a) The $6.5 billion mandatory funding proposal in the FY2023 State/Foreign Operations budget justification — $4.5B seed for the Pandemic Fund, $1.0B bilateral, $500M CEPI, $500M Emergency Reserve Fund — was never enacted; Congress substituted a $5.0 billion authorization with no matching appropriation (CRS IF12590). (b) The US board seat is institutional; the individual occupying it is not named in the sources opened — UNVERIFIED — no primary source located. (c) Leverage anomaly on the largest regional award: $39,996,957.75 approved against $234,198,132 in "in kind & in cash" co-financing and $68,113,959 in Africa CDC co-investment, with the in-kind/in-cash split undisclosed (Pandemic Fund HARMONIZE).

• 6. PEPFAR Infrastructure Repurposed for Pandemic Surveillance: 10. Intelligence community relationship. No verified link found.

• 6. PEPFAR Infrastructure Repurposed for Pandemic Surveillance: 11. HHS/DOD relationship. CDC (HHS) is the implementing agency for the documented surveillance repurposing (EID 22-0789); DOD is one of the four agencies whose PEPFAR funding is counted in congressional totals (KFF PEPFAR). No DTRA/DARPA/BARDA role documented — no verified link found.

• 7. Global Virome Project (and the PREDICT / STOP Spillover Lineage): 10. Intelligence community relationship. No CIA/ODNI/NIC/In-Q-Tel funding or partnership was documented in the sources opened — no verified link found. National-security handling is documented instead through State Department channels: a 28 September 2017 cable signed by Ambassador Terry Branstad endorsing the China collaboration, and a 20 May 2019 draft pitch addressing the project's national-security implications (USRTK, secondary).

• 7. Global Virome Project (and the PREDICT / STOP Spillover Lineage): 11. HHS/NIH and DOD relationship. An NIAID representative at US Embassy Beijing (Ping Chen) appears in the FOIA email record (USRTK, secondary). No documented DTRA, DARPA, JPEO-CBRND, or BARDA funding of GVP was located — no verified link found.

• 8. Nuclear Threat Initiative | bio, the Global Health Security Index, and the Biosecurity Innovation and Risk Reduction Initiative (BIRRI): 3. Lead and funding agencies; award IDs. No US government agency, award ID, contract, or grant to NTI | bio, BIRRI, IBBIS, or the GHS Index was located. NTI's GHS Index page states no US government funding and no US government contracts (NTI GHS Index); the IBBIS page states the same (NTI IBBIS); Open Philanthropy's grant page states no government partnerships and no US government funding (Open Philanthropy). No verified link found between NTI | bio and any US federal funding source.

• 8. Nuclear Threat Initiative | bio, the Global Health Security Index, and the Biosecurity Innovation and Risk Reduction Initiative (BIRRI): 10. Intelligence community relationship. No verified link found.

• 8. Nuclear Threat Initiative | bio, the Global Health Security Index, and the Biosecurity Innovation and Risk Reduction Initiative (BIRRI): 11. HHS/NIH and DOD relationship. No verified link found in the NTI pages, the Open Philanthropy grant page, or the ProPublica filings opened. Documented government interface is legislative and diplomatic, not financial: Jaime M. Yassif, Ph.D., testified before the House Foreign Affairs Subcommittee on Asia, the Pacific, Central Asia, and Nonproliferation at a hearing titled "Biosecurity for the Future: Strengthening Deterrence and Detection" on Wednesday, 8 December 2021 (NTI IBBIS).

• 8. Nuclear Threat Initiative | bio, the Global Health Security Index, and the Biosecurity Innovation and Risk Reduction Initiative (BIRRI): 13. Key personnel and cross-program appointments. Jaime Yassif — Open Philanthropy grant investigator for the GHS Index grant (Open Philanthropy) and subsequently NTI's VP, Global Biological Policy and Programs ($288,405 compensation, FY2024) (ProPublica) — a grantmaker-to-grantee

transition worth noting. Elizabeth (Beth) Cameron, VP Global Biological Policy & Programs FY2017–FY2021, later served on the National Security Council (ProPublica; NSC service UNVERIFIED — no primary source located in this session). Margaret Hamburg, former FDA Commissioner, served as Interim Vice President, Global Biological Policy and Programs in FY2021 and as a board member in FY2022 (ProPublica). Ernest J. Moniz, former Secretary of Energy, is CEO and Co-Chair ($472,562, FY2024) (ProPublica). Others: Joan Rohlfing (President and COO), Hayley Severance (Deputy VP), Jessica Bell (Senior Director), Lynn Rusten (VP, Global Nuclear Policy Program, $476,544) (ProPublica); Piers Millett, founding Executive Director of IBBIS; R. Alta Charo, former NTI David A. Hamburg Distinguished Fellow (NTI IBBIS).

- 9. Rockefeller Foundation Pandemic Prevention Institute (PPI): 3. Lead and funding agencies; award IDs. Privately funded. No US federal agency, award ID, contract, or grant was located. The launch release names no CDC, HHS, NIH, or other US federal agency and states no US government funding or contracts (Rockefeller Foundation); the PPI brochure likewise names no US government agency and no federally funded partner, and describes PPI as leveraging the Foundation's "independent non-governmental status" (PPI brochure). No verified link found between PPI and any US government funding or partnership agreement.

- 9. Rockefeller Foundation Pandemic Prevention Institute (PPI): 10. Intelligence community relationship. No verified link found.

- 9. Rockefeller Foundation Pandemic Prevention Institute (PPI): 11. HHS/NIH and DOD relationship. No verified link found in any PPI document opened. The only institutional adjacency is personnel: Rick Bright previously directed BARDA (HHS) before joining Rockefeller — his BARDA tenure is not stated in the Rockefeller release opened, so that specific attribution is UNVERIFIED — no primary source located in this session; the release states only that he joined as SVP of Pandemic Prevention and Response (Rockefeller Foundation).

- 9. Rockefeller Foundation Pandemic Prevention Institute (PPI): 13. Key personnel. Dr. Rajiv J. Shah, President, Rockefeller Foundation — and previously USAID Administrator (USAID role UNVERIFIED — no primary source located in this session); Dr. Rick Bright, SVP and PPI CEO; external partners named in the launch: Dr. Tedros Adhanom Ghebreyesus (WHO Director-General) and Sir Jeremy Farrar (then Director, Wellcome Trust) (Rockefeller Foundation).

- 10. Gates Foundation–Funded Biosurveillance with Verified US Federal Co-Funding: 3. Lead and funding agencies; award IDs. Led by the African Union Commission through Africa CDC. US CDC is contributing funding and technical assistance, with its technical contributions coming through the Advanced Molecular Detection (AMD) programme (African Union). The Gates Foundation is likewise "contributing funding and technical assistance" (African Union). Gates Foundation grant INV-036413 funded design of the associated data platform (PMC12181013). No US federal award or contract number for the CDC contribution was located — UNVERIFIED — no primary source located.

- 10. Gates Foundation–Funded Biosurveillance with Verified US Federal Co-Funding: 10. Intelligence community relationship. No verified link found.

- 11. US Government–Funded Biosurveillance in Africa via Africa CDC and CDC Africa Programs (Post-2020): 10. Intelligence community relationship. No verified link found. No document opened in this session connects Africa CDC, AFENET, or the CDC Africa regional programs to any US intelligence agency, IC-funded program, or IC data-sharing arrangement.

- 11. US Government–Funded Biosurveillance in Africa via Africa CDC and CDC Africa Programs (Post-2020): 11. Relationship to HHS/NIH/NIAID and DOD/DTRA/BARDA. HHS: US CDC is the lead US agency, operating through the Division of Global Health Protection, the AMD program, FETP, and the PHEM Fellowship (CDC newsroom, 16 Apr. 2024). DOD: KFF states some US funding to Africa CDC has come from the Defense Threat Reduction Agency,

primarily through the Department of Defense — the single explicit DOD-to-Africa CDC funding statement located in this session; no DTRA award number, amount, or year was located — UNVERIFIED — no primary source located (KFF Africa CDC). NIH/NIAID and BARDA: no verified link found to Africa CDC in any source opened here.

- 11. US Government–Funded Biosurveillance in Africa via Africa CDC and CDC Africa Programs (Post-2020): 12. Controversies, oversight findings, anomalies. Funding-opacity anomaly: the United States has been a founding institutional partner of Africa CDC since 2015, yet the best available public accounting of its direct support is a range — "approximately $1 million to $3 million annually," largely in kind — while a $150 million 2018 announcement for African national health institutes cannot be traced to Africa CDC specifically (KFF Africa CDC). Disparity anomaly: on the same public record, the MasterCard Foundation committed $1.5 billion in 2021 and the World Bank $100 million in 2022 — private and multilateral money exceeding documented direct US contributions by two to three orders of magnitude (KFF Africa CDC). Geopolitical anomaly: the United States and the People's Republic of China signed a 2016 Memorandum of Understanding to jointly support Africa CDC, with China separately having financed and constructed Africa CDC's headquarters facilities — a documented instance of US and Chinese state capacity building inside the same continental disease-surveillance institution (KFF Africa CDC). Award-growth anomaly: cooperative agreement NU2GGH002493 to AFENET grew from $3,250,000 to $14,356,795 — a 4.4-fold increase in obligated value from its September 2023 award (HigherGov). Reporting-gap anomaly: the March 2022 White House fact sheet announcing an expanded US–Africa CDC partnership states no dollar figure of any kind (White House). No GAO or HHS Inspector General report specific to US funding of Africa CDC was located in this session — UNVERIFIED — no primary source located.

- Cross-Cluster Findings: 5. Explicit non-findings. No verified US government funding link was located for: WHO's GOARN as a distinct appropriations line; the Nuclear Threat Initiative's biosecurity program; or the Rockefeller Pandemic Prevention Institute. Each is recorded as "no verified link found" rather than as an absence of relationship.

Part VIII: Obscure Programs and Gain-of-Function Policy Architecture

- Cluster summary / introductory material: Audit cluster 8 of 8. Prepared 12 Aug. 2026. Sourcing standard: STANDARDS.md (primary sources first; every factual claim carries an inline link to a URL fetched this session; unverifiable items are labeled "UNVERIFIED — no primary source located").

- 1. "GOHIS" — NEGATIVE FINDING for any US Government / DOD / HHS Program: 4. Total government funding. UNVERIFIED — no primary source located stating a total budget for the Quadripartite GOHIS. No US funding of any amount was located.

- 1. "GOHIS" — NEGATIVE FINDING for any US Government / DOD / HHS Program: 7. Locations. Rome (FAO), Geneva (WHO), Paris (WOAH), Nairobi (UNEP) are the Quadripartite headquarters; the source does not assign GOHIS a physical facility. UNVERIFIED — no dedicated facility located.

- 1. "GOHIS" — NEGATIVE FINDING for any US Government / DOD / HHS Program: 13. Key personnel. UNVERIFIED — no named US personnel associated with a "GOHIS" program were located.

- 2. BioCat / BioCat 2.0 (Pacific Northwest National Laboratory) — POSITIVE FINDING: 2. Active dates / lifecycle. Literature searching for the underlying systematic review was completed 31 December 2010; the select-agent scope was fixed to the National Select Agent Registry as of June 2011; the journal article was received 2 November 2012, accepted 19 February 2014, and published 19 March 2014 (PLOS ONE). The BioCat 2.0 report is dated

September 2013 (PNNL-22767). The biocat.pnnl.gov host is no longer reachable; UNVERIFIED — no primary source located stating a formal termination date.

• 2. BioCat / BioCat 2.0 (Pacific Northwest National Laboratory) — POSITIVE FINDING: 4. Total government funding. UNVERIFIED — no primary source located stating a dollar value for the BioCat task. The DHS funding statement identifies the sponsor but not the amount (PLOS ONE).

• 2. BioCat / BioCat 2.0 (Pacific Northwest National Laboratory) — POSITIVE FINDING: 9. Products / companies / spinoffs. None located. BioCat was a government-lab knowledge product, not a commercialized platform. UNVERIFIED — no licensing, spinoff, or acquisition located.

• 2. BioCat / BioCat 2.0 (Pacific Northwest National Laboratory) — POSITIVE FINDING: 10. Relationship to the Intelligence Community. No explicit evidence located. DHS NBIC sits within the DHS component chain, and NBIC was later moved into a CWMD Information Analysis Directorate (GAO-24-106142), but no document reviewed places BioCat under IC tasking.

• 3. Dual Use Research of Concern (DURC) Policy Framework, 2012–2024: 10. Relationship to the Intelligence Community. No explicit evidence located of IC participation in DURC policy formulation, other than the FBI's standing ex officio seat on the NSABB (see §5).

• 4. Potential Pandemic Pathogen Care and Oversight (P3CO) Framework and the 2014–2017 GOF Funding Pause: 10. Relationship to the Intelligence Community. No explicit evidence located.

• 4. Potential Pandemic Pathogen Care and Oversight (P3CO) Framework and the 2014–2017 GOF Funding Pause: 13. Key personnel. The P3CO Review Group was chaired by Dr. Christopher (Chris) Hassell, HHS Deputy Assistant Secretary for Preparedness and Response (House Energy and Commerce). Cross-program appointment anomaly: a David Christian Hassell, Ph.D. is listed on the 2016 NSABB roster as Deputy Assistant Secretary of Defense for Chemical and Biological Defense — the DOD ex officio (NSABB 2016 Roster). The name match between the DOD CBD official and the later HHS ASPR P3CO chair is documented here as a name correspondence across two primary rosters; UNVERIFIED — no primary source located that explicitly states these are the same individual. Full membership of the P3CO Review Group beyond the chair remains unpublished; GAO and two House committees have all failed to obtain it (GAO-23-105455; House Oversight letter). Francis Collins, NIH Director, signed the December 2017 statement lifting the pause (NIH).

• 5. National Science Advisory Board for Biosecurity (NSABB): 4. Total government funding. UNVERIFIED — no primary source located stating an NSABB operating budget.

• 6. Executive Order 14292 and the 2025 Termination of "Dangerous Gain-of-Function Research": 10. Relationship to the Intelligence Community. No explicit evidence located in the order's text as fetched.

• 6. Executive Order 14292 and the 2025 Termination of "Dangerous Gain-of-Function Research": 13. Key personnel. UNVERIFIED — the fetched text of EO 14292 does not name implementing officials beyond agency heads. Congressional context: CRS R47114 references pending bills H.R. 1864, S. 738, and S. 854 (CRS R47114); see also the short CRS explainer IF12021, updated 10 March 2025 (CRS IF12021).

• 7. Federal Select Agent Program (FSAP) and the National Select Agent Registry: 4. Total government funding. UNVERIFIED — no primary source located this session stating an FSAP appropriation total. Registry scale is documented instead: 63 select agents and toxins currently regulated and 230 registered entities (selectagents.gov); GAO counted 66 agents as of March 2017 (GAO-18-145).

• 7. Federal Select Agent Program (FSAP) and the National Select Agent Registry: 13. Key personnel. UNVERIFIED — the fetched annual report identifies program contacts (LRSAT@cdc.gov for DRSC and DASAT@usda.gov for DASAT)

rather than named division directors (2024 FSAP Annual Report).

- 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines: 9. Products / companies / spinoffs. Named materiel programs in the justification books: Joint Biological Tactical Detection System (JBTDS), Enhanced Maritime Biological Detector (EMBD), Joint Handheld Biological Identifier, CBRN Dismounted Reconnaissance Sets Kits and Outfits, Multi-phase Chemical Agent Detector, and Proximate Chemical Agent Detector (FY2026 CBDP RDT&E Justification Book; FY2025 CBDP Procurement Justification Book). Prime contractors per line item are not identified in the justification books; UNVERIFIED — contractor identities not located in the budget documents fetched.

- 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines: 10. Relationship to the Intelligence Community. No explicit evidence located in the fetched budget documents.

- 8. DoD Chemical and Biological Defense Program (CBDP) — Biosurveillance Budget Lines: 13. Key personnel. UNVERIFIED — the fetched justification books do not name program officials. David Christian Hassell is documented as Deputy Assistant Secretary of Defense for Chemical and Biological Defense as of the 2016 NSABB roster (NSABB 2016 Roster).

- 9. DTRA Biosurveillance Ecosystem (BSVE): 3. Lead and funding agencies. DTRA (originating sponsor) and DHS NBIC (successor owner) (DTRA BSVE fact sheet; GAO-24-106142). UNVERIFIED — no contract/award ID for the winter 2023 BSVE contract was located.

- 9. DTRA Biosurveillance Ecosystem (BSVE): 4. Total government funding. UNVERIFIED — no primary source located stating BSVE lifetime cost. GAO's report on NBIC provides NBIC-level funding only (§10).

- 9. DTRA Biosurveillance Ecosystem (BSVE): 6. Entities involved. DTRA; DHS NBIC as co-developer and eventual owner (PMC5462202); Draper Laboratory (COMBS prototype) (PMC4050829). UNVERIFIED — the identity of the winter 2023 BSVE contractor was not located.

- 9. DTRA Biosurveillance Ecosystem (BSVE): 10. Relationship to the Intelligence Community. No explicit evidence located. BSVE sat under DTRA J9 and then DHS CWMD's Information Analysis Directorate (GAO-24-106142).

- 10. DHS National Biosurveillance Integration Center (NBIC): 13. Key personnel. UNVERIFIED — no NBIC director is named in the primary sources fetched this session.

- 11. DoD Global Emerging Infections Surveillance (DoD-GEIS / AFHSC-GEIS / AFHSD GEIS Branch) and the DHA Integrated Biosurveillance Branch: 4. Total government funding. UNVERIFIED — no primary source located giving a cumulative GEIS total. The FY2007 core figure above is the only per-year figure verified this session (Russell et al.).

- 12. ESSENCE and SAGES (Johns Hopkins University Applied Physics Laboratory): 3. Lead and funding agencies. Johns Hopkins University Applied Physics Laboratory as developer, for DOD and NCR health departments, "with additional support from the Defense Advanced Research Projects Agency" (JHU/APL). CDC has continued to acquire ESSENCE support from JHU/APL on a sole-source basis (SAM.gov notice). UNVERIFIED — no contract or award number is stated in the APL release.

- 12. ESSENCE and SAGES (Johns Hopkins University Applied Physics Laboratory): 4. Total government funding. UNVERIFIED — no primary source located giving a cumulative ESSENCE program cost.

- 12. ESSENCE and SAGES (Johns Hopkins University Applied Physics Laboratory): 10. Relationship to the Intelligence Community. No explicit evidence located. DARPA support is documented but DARPA is a DOD research agency, not an IC element (JHU/APL).

- 13. IARPA Open Source Indicators (OSI) and EMBERS: 4. Total government funding. "Funded by a $22M contract from IARPA's Open Source Indicators (OSI) program" (Butler presentation). UNVERIFIED — no contract or award number is stated in the source.
- 13. IARPA Open Source Indicators (OSI) and EMBERS: 9. Products / spinoffs. UNVERIFIED — no spinoff company or commercial licensing located.
- 13. IARPA Open Source Indicators (OSI) and EMBERS: 11. Relationship to HHS/DOD. No explicit evidence located of HHS or DOD funding or data-sharing for EMBERS.
- 14. USAID STOP Spillover (Strategies to Prevent Spillover): 3. Lead and funding agencies. USAID; implemented by Tufts University (USAID press release). UNVERIFIED — "Contract number: Not stated" and "Award number: Not stated" on the USAID release; no award ID was located this session.
- 14. USAID STOP Spillover (Strategies to Prevent Spillover): 10. Relationship to the Intelligence Community. No explicit evidence located.
- 14. USAID STOP Spillover (Strategies to Prevent Spillover): 12. Controversies / anomalies. The USAID release states plainly for every oversight category: "No oversight findings stated," "No audit findings stated," "No investigations stated" (USAID press release). The material anomaly is termination: the agency that awarded and supervised the $100M project ceased to exist on 1 July 2025 (CNN — secondary), leaving the disposition of project records and any close-out audit UNVERIFIED — no primary source located.
- 14. USAID STOP Spillover (Strategies to Prevent Spillover): 13. Key personnel. UNVERIFIED — no individual project director is named in the USAID release. Tufts hosts related work through its Global Animal and Sustainable Systems (GASS) Lab (Tufts GASS Lab).

Limitations of This Audit

This audit is a public-record synthesis, not a forensic investigation with subpoena power, classified access, or access to internal agency and contractor systems. It does not establish the total spending of a program unless a cited primary source published a total; many reported values are obligations, ceilings, appropriations, contract options, private financing, or accounting values that cannot be added without double-counting. Historic USAID assistance reporting and recipient-name changes create particular gaps. Some public records are late, incomplete, unavailable, or only available through secondary reporting.

The evidence standard is deliberately conservative. A documented connection may establish that an award, appointment, investment announcement, subcontract, or co-location occurred; it does not establish intent, operational control, wrongdoing, or causation. Conversely, an “UNVERIFIED” or “no verified link found” entry describes the outcome of the research session, not proof of absence. Several potentially important claims—especially alleged secret programs, corporate transactions, intelligence links, and personnel identities—remain leads that require primary documents, FOIA production, or formal agency records before they can be treated as verified.

Classified programs and intelligence assessments beyond public release are outside scope. The audit also does not independently audit underlying databases, recreate all USAspending queries, or test the scientific efficacy, legality, privacy impact, or policy desirability of the programs. It is designed as a source-traceable manuscript for subsequent reporting, verification, and targeted records requests.

Appendix: Link Verification Methodology and Findings

Every citation in this audit was gathered by directly fetching the source page or document during active research sessions conducted August 12, 2026. As a final quality-control pass, all 344 unique URLs cited in the body of this report were re-tested with automated HTTP requests, and any URL that did not return a clean success code was independently re-verified by fetching it a second time through a full content-rendering pass rather than a bare status-code check.

Results: 262 of 344 URLs (76%) returned a clean live response on the first automated pass. The remaining 82 were individually re-checked. The large majority of these were confirmed live and unchanged — the initial "failure" codes (401/403/405/406) were bot-protection responses from automated-request filtering on otherwise-live, authoritative domains, including congress.gov, dtra.mil, dla.mil, hhs.gov, mriglobal.org, gmu.edu, the Johns Hopkins Center for Health Security's centerforhealthsecurity.org, science.org, oup.com, and esd.whs.mil. Each of these domains had already been successfully fetched with full content during the original research sessions that produced the citations relying on them; the bot-protection response on re-check reflects the automated verification method, not the state of the page.

A smaller set of URLs were corrected during this pass because the original citation contained a truncated or malformed filename (USAID FY23 Health Systems Strengthening report to Congress) or because a more stable canonical URL was available for the same content (the Rockefeller Foundation's $150 million Pandemic Prevention Institute commitment is now cited to the original PRNewswire release rather than a Rockefeller Foundation web page that no longer resolves; the Global Virome Project leadership reference now points to the site's "Our History" page rather than a since-removed "leadership-team" URL).

Confirmed dead or unreachable as of August 12, 2026 (flagged, not removed, so the research trail remains auditable):

- https://api.healthsecuritynet.org/get/file/PA00SW1M.pdf?id=1838 — USAID document server returns a client error; no working mirror located in this session. Recommend a direct USAID Development Experience Clearinghouse (DEC) search for the document ID.
- https://www.globalbiodefense.com/2015/12/03/mriglobal-mobile-labs-west-africa/ — returns a client error; no Wayback Machine snapshot located in this session.
- https://www.stimson.org/wp-content/files/file-attachments/The_International_Health_Regulations_White_Paper_Final_1.pdf — file no longer hosted at this path; no working mirror located in this session.
- https://www.dhs.gov/xlibrary/assets/mgmt/st-nbaccfacility2012.pdf — DHS's legacy xlibrary file path returns a client/bot-protection error and could not be independently confirmed live in this session; treat as unverified rather than dead until a human confirms via browser.
- Several Biden-administration whitehouse.gov press releases and fact sheets referenced for pre-2025 events return errors following the executive-branch website transition after the change in administration; where this occurred, the underlying claim is independently corroborated by a second, still-live source (e.g., a CRS report, agency page, or contemporaneous news account) cited alongside it.

This appendix exists so that any source a reader cannot immediately open can be traced back to exactly how and when it was checked, consistent with the audit's standard of treating unresolved verification gaps as explicit findings rather than silent omissions.

Works Cited

This deduplicated source index preserves every unique URL cited in the master manuscript. It replaces duplicated bibliographic entries while retaining the complete URL record.

- https://comptroller.war.gov/Portals/45/Documents/defbudget/FY2026/budget_justification/pdfs/01_Operation_and_Maintenance/O_M_VOL_1_PART_2/CTR_OP-5.pdf
- https://www.washingtontechnology.com/contracts/2025/08/dtra-awards-35b-recompete-counter-wmd-support-contract/407654/
- https://www.oversight.gov/sites/default/files/documents/reports/2021-08/SIGAR-21-08-FA.pdf
- https://media.defense.gov/2022/Mar/11/2002954612/-1/-1/0/FACT-SHEET-THE-DEPARTMENT-OF-DEFENSE'S-COOPERATIVE-THREAT-REDUCTION-PROGRAM-BIOLOGICAL-THREAT-REDUCTION-PROGRAM-ACTIVITIES-IN-UKRAINE.PDF
- https://ua.usembassy.gov/biological-threat-reduction-program/
- https://www.dtra.mil/Portals/61/Documents/Factsheets/DTRA-CTR-Ukraine-Factsheet.pdf
- https://api.healthsecuritynet.org/get/file/PA00SW1M.pdf?id=1838
- https://www.usaspending.gov/award/ASST_NON_AIDOAAA1400102_072
- https://www.vetmed.ucdavis.edu/research/researchgrants/pandemic-threats
- https://www.gao.gov/assets/gao-23-106119.pdf
- https://oig.hhs.gov/oas/reports/region5/52100025.pdf
- https://www.dodig.mil/In-the-Spotlight/Article/3811827/press-release-management-advisory-review-of-dod-funds-provided-to-peoples-repub/
- https://www.sec.gov/Archives/edgar/data/1595047/000159504715000001/primary_doc.xml
- https://www.usaspending.gov/award/CONT_AWD_HDTRA114C0104_9700_-NONE-_-NONE-
- https://www.sec.gov/Archives/edgar/data/1830214/000095017022025002/dna-20220930.htm
- https://www.sec.gov/Archives/edgar/data/1895571/000189557121000001/primary_doc.xml
- https://www.cdc.gov/traveler-genomic-surveillance/about/index.html
- https://www.usaspending.gov/
- https://www.cdc.gov/advanced-molecular-detection/php/success-stories/airport-genomic-surveillance.html
- https://www.gao.gov/products/gao-15-793
- https://www.gao.gov/assets/870/864066.pdf
- https://www.hsgac.senate.gov/wp-content/uploads/imo/media/doc/WilsonTestimony.pdf
- https://patents.google.com/patent/US7725565B2/en

- https://www.oig.dhs.gov/sites/default/files/assets/Mgmt/OIG_07-61_Jul07.pdf
- https://www.govinfo.gov/content/pkg/CHRG-110hhrg46259/html/CHRG-110hhrg46259.htm
- https://www.cdc.gov/forecast-outbreak-analytics/leadership/dylan-george.html
- https://www.gao.gov/assets/gao-16-99.pdf
- https://www.gao.gov/products/gao-14-267t
- https://www.gao.gov/assets/820/814738.pdf
- https://comptroller.war.gov/Portals/45/Documents/defbudget/FY2026/budget_justification/pdfs/03_RDT_and_E/RDTE_CBDP_PB_2026.pdf
- https://www.highergov.com/idv/HHSO100201200002I/
- https://projects.propublica.org/nonprofits/organizations/314379427
- https://www.everycrsreport.com/reports/97-1027.html
- https://www.dtra.mil/About/Mission/Cooperative-Threat-Reduction/
- https://www.dtra.mil/Portals/125/Documents/AFR/AFR-FINAL11-7-2024-remediated.pdf
- https://www.dtra.mil/portals/61/documents/history/dtra%20history%201998-2008-final.pdf
- https://www.rand.org/content/dam/rand/pubs/research_reports/RR600/RR660/RAND_RR660.pdf
- https://www.dtra.mil/Portals/125/Documents/CTR-Factsheets/DTRA-Fact-Sheet-BTRP-Aug-2023.pdf
- https://www.defensedaily.com/dtra-selects-five-firms-for-potential-4b-under-bio-threat-reduction-effort/homeland-security/
- https://www.prnewswire.com/news-releases/ginkgo-bioworks-announces-strategic-purchase-of-epidemiological-data-infrastructure-assets-301609075.html
- https://www.nationalacademies.org/read/25681/chapter/3
- https://www.nti.org/wp-content/uploads/2021/09/NunnLugarBrochure_2012.pdf
- https://www.everycrsreport.com/reports/R43143.html
- https://www.highergov.com/contract-opportunity/cooperative-threat-r-hdtra124r0001-award-hdtra125de006-black-veatch-special-projects-corp-05c86/
- https://www.highergov.com/contract-opportunity/sustainment-of-the-electronic-integrated-disease-s-hdtra120r0015-u-2210f/
- https://www.dtra.mil/Portals/125/Documents/Business%20Docs/Active_Contract_List-as-of-SEP22-v20230412.pdf
- https://www.dtra.mil/Portals/61/Documents/CB/BSVE%20Fact%20Sheet_04282015_PA%20Cleared.pdf
- https://www.washingtontechnology.com/2018/06/dtra-taps-six-for-970m-threat-reduction-program-support-contract/348784/
- https://www.dtra.mil/Portals/61/Documents/Factsheets/CRS-Ukraine-Factsheet.pdf?ver=6Ur80qwgyBSZtFLhcHGaEA==
- https://www.gao.gov/products/gao-04-330
- https://www.gao.gov/assets/gao-19-635t.pdf
- https://www.armed-services.senate.gov/imo/media/doc/Myers_04-23-131.pdf

- https://www.washingtontimes.com/news/2024/oct/23/inside-ring-china-russia-target-pentagon-agency-di/
- https://www.grazingthesurface.com/wp-content/uploads/2023/04/CONTRACT-to-METABIOTA-INC.-_-USAspending.pdf
- https://news.clearancejobs.com/2026/01/23/battelle-wins-52-9m-contract-to-help-prevent-and-detect-global-disease-threats/
- https://www.dvidshub.net/news/389628/dtra-partner-nations-south-east-asia-enabled-countries-rapidly-respond-outbreaks
- https://ge.usembassy.gov/lugar-center-supports-georgian-ncdc-on-covid-19-response/
- https://2021-2025.state.gov/the-kremlins-allegations-of-chemical-and-biological-weapons-laboratories-in-ukraine/
- https://www.cnbc.com/2012/10/08/black-veatch-awarded-contract-to-help-counter-biological-threats.html
- https://www.bv.com/projects/cbep-ukraine-phase-ii-btric-to-1
- https://ua.usembassy.gov/wp-content/uploads/sites/151/130202-Vinnitsa-DL-Fact-Sheet.pdf
- https://ua.usembassy.gov/wp-content/uploads/sites/151/13-0091-Lviv-LRIEH-Fact-Sheet_final_ENG.pdf
- https://en.wikipedia.org/wiki/Lugar_Research_Center
- https://jamestown.org/russia-dusts-off-conspiracy-theories-about-georgias-lugar-center-laboratory-in-midst-of-covid-19-crisis/
- https://www.bechtel.com/press-releases/bechtel-wins-u-s-govt-work-to-reduce-biological-threats-in-uzbekistan/
- https://globalbiodefense.com/2016/11/16/ch2m-awarded-35m-biosafety-biosecurity-contract/
- https://www.voanews.com/a/fact-check-chinese-media-is-wrong-us-funded-lab-in-kazakhstan-is-to-prevent-bioterrorism/7117525.html
- https://pmc.ncbi.nlm.nih.gov/articles/PMC8545806/
- https://www.nationalgeographic.com/culture/article/new-high-tech-laboratory-in-kazakhstan-to-fight-plague-outbreaks
- https://eurasianet.org/armenia-to-open-doors-of-us-built-biolabs-to-russia
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